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A treatise on language methods and language-games in autism

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REFERENCE

**A TREATISE ON LANGUAGE METHODS
AND LANGUAGE-GAMES IN AUTISM**

By

NICHOLAS PAUL CHOWN

**A thesis submitted in partial fulfillment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Philosophy**

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ABSTRACT

A TREATISE ON LANGUAGE METHODS AND LANGUAGE-GAMES IN AUTISM

Although it is generally understood that autism is a developmental disability affecting social learning, my social constructionist perspective suggested to me that, strangely, current theories aimed at explaining the nature of autism appeared not to fully reflect the essential *social* aspects of autism. Given that typically developing human beings become fully socialised through learning a first language, it appeared to me that autism research has, especially of late, failed to give sufficient attention to *language* despite Kanner's advice.

In researching this thesis I have sought to make a contribution to knowledge of my subject by: (1) developing a synthesis of current knowledge of autistic language methods as a practical framework to guide future research focused on language in autism; (2) critiquing 'established' autism theory; (3) drawing attention to Ludwig Wittgenstein's neglected contributions to the philosophy of mind; and (4) reviewing the contribution of 'alternative' theory, including Wittgenstein's criteriological theory, to an understanding of autism.

My research has involved reviewing: (a) the literature on autistic language methods; (b) Conversation Analysis of autistic conversation; (c) narrative writing by authors diagnosed or retrospectively diagnosed with autism; and (d) existing autism theory.

I conclude that there are specific features of talk and writing that reflect autism with some features of autistic writing being a 'mirror image' of features of autistic talk. A further, important, conclusion is that there are *strengths* as well as *weaknesses* associated with autistic talk and writing i.e., from a linguistic stance, it is wrong to regard autism as a disability; rather, it involves a different way of communicating – both verbally and in writing – than is seen in typically developing people. I also conclude that alternative theory has much to contribute to an understanding of autism, and that the atypical nature of autistic social development results in autistic people failing to fully come to terms with language-games.

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I would also like to thank Paul Garland whose superb leadership of the Sheffield Hallam EdD programme more than justified my initial decision to choose the EdD over the PhD to obtain the benefit of the training in scholarship and research that the former provides. I must also thank all the members of the EdD Cohort 6 (2009/10) whose contributions to the taught sessions helped make them such a formative and valuable experience for me. In particular, I wish to acknowledge the other two members of the cohort working on disability related topics – Sandra Ellis (autism) and Steve Campbell (dyslexia) – who have been a great help.

And without the encouragement of my wife, Sharon Chown, whose support for my career and studies has been constant and unconditional, I could not have completed this thesis but, more importantly, would not have even considered myself capable of studying at this level.

I should also thank the Metropolitan Police Service whose funding for my Post Graduate Certificate in Asperger Syndrome and Masters in Autism led to a career in autism.

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¹ The other features of autistic writing proposed by Julie Brown are: genre-bending, an absence of sustained narrative, an absence of fully drawn characters, inclusion of multitudes of detail, and rich use of language including rich symbolism (Brown, 2010).

² This is my name for Wootton's version of interaction theory (Wootton, 1997).

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CHAPTER I

INTRODUCTION

They, [autistic children, NC] and especially the intellectually gifted among them, undoubtedly have a special creative attitude towards language. They are able to express their own original experience in a linguistically original form. This is seen in the choice of unusual words which one would suppose to be totally outside the sphere of these children. It is also seen in newly formed or partially restructured expressions which can often be particularly accurate and perspicacious, but also, of course, often quite abstruse. (Asperger, in (Ed.) Frith, 1991, pp. 70/71)

My development of an interest in the importance of language in autism (although I do not regard autism as a disability of language) and in Ludwig Wittgenstein's concept of the language-game (which will be discussed at length in a later chapter) stems from a critique of the 'main' existing models of disability (the medical and social models), my interest in autistic language methods, and the work of Professor Elinor Ochs and her team of linguistic anthropologists at the University of California at Los Angeles. There is insufficient space to delve into models of disability in any depth here; suffice it to say that I believe that an *interactional* perspective to disability (of course, there is a debate also to be had over whether autism is a disability) is preferable to either an individual (medical model) or societal (social model) approach. I prefer an interactional model for two reasons: firstly, because, for me, this approach places a spotlight on the people whose interactions produce society³ but also, in

³ I have argued elsewhere that the social model takes a *societal* perspective on disability. My view is that the work of sociologists such as Goffman, Falk, Shaw (Goffman, 1963; Shaw, 1991; Falk, 2001) indicates that the primary cause of disability does not lie with society (and certainly not with the individual) but with all human

the context of my thesis, because an interactional model reflects the nature of the difficulties associated with autism better than either a medical or social model. The inextricable linkage between social interaction and language led to an interest in autistic language, my interest in Sacks, Schegloff and Jefferson's Conversation Analysis (CA)⁴ (also discussed at length later on) introduced me to the University of California's corpus of CA research, and this research – with its reference to language-games – eventually brought me to Wittgenstein.

Consideration of language-games caused me to wonder whether this concept might have some explanatory potential as far as autism was concerned. As Rajendran and Mitchell begin their summation of the cognitive theories of autism, 'Three cognitive theories have dominated psychological research into autism' (Rajendran and Mitchell, 2007, p. 224) but, despite extensive research, none of the three theories – theory of mind, dysexecutive functioning, and weak central coherence – can explain all aspects of autism and, although attempts have been made to identify links between the three theories, 'there is no fully integrated account which manages to both describe and explain each and every characteristic of autism' (ibid., p. 247). For each study supporting one of the theories or some link between them, there is often another study purporting to prove the exact opposite. In addition to investigating the value of the language-game concept in the context of autism, I shall briefly consider some of the less well-known (neglected?) theories of autism in order to see if (a) an alternative approach to integrating existing theory might be plausible, and (b) if concluding

beings who, acting together socially, create society; society cannot exist without individuals and my opinion is that blaming society for disability – while an improvement on blaming individual disabled people – is a means of disowning personal responsibility for creating disability; 'it's not me, society is to blame'). A model that places *social interaction* at the heart of disability would shine the anti-discrimination spotlight on us all. Of course, I do not underestimate the huge contribution of the social model to the lives of disabled people.

⁴ The conversation analysis developed by Harvey Sacks, Emmanuel Schegloff and Gail Jefferson at the University of California at Los Angeles in the 1960s and 1970s is a means of '(describing) the underlying social organization – conceived as an organized substratum of interactional rules, procedures, and conventions – through which orderly and intelligible social interaction is made possible' (Goodwin and Heritage, 1990, p. 283). CA was first used to study ordinary conversation but has since been applied to many other types of talk-in-interaction. A special form of transcription was developed to record the key features of talk-in-interaction such as gaps and overlaps in talk, stress on particular words, and non-verbal activity, as well as the talk itself.

that the language-game is relevant to autism, whether an integrated theoretical approach that complements the proposed status of language-games in autism can be found.

One of the two pioneers of autism research – Leo Kanner – wrote of the importance of autistic language for investigation of the concept of autism. The other pioneer – Hans Asperger – pointed out that the children he saw are especially creative with their use of language. A less well-remembered researcher – Gerhard Bosch – undertook a clinical and phenomenological-anthropological investigation of autism in which he was guided by language, and probably by Kanner’s advice to those following in his footsteps.

Although it is generally understood that autism is a developmental disability affecting social learning, the social constructionist perspective that I bring to my research suggested to me that, strangely, current theories of autism appeared not to fully reflect this understanding, especially the essential *social* aspects of autism. Ochs et al. write that ‘Although autism is characterized as a social disorder, social functioning tends to be arbitrarily configured and under-conceptualized in clinical diagnostic manuals and in many psychological studies of the disorder. With the exception of Vinden and Astington (2000), critique of this situation is rare’ (Ochs et al., 2004, p. 154). Given that typically developing human beings become fully socialised through learning a first language (e.g., Bruner, 1977, 1986, 1996; Piaget, 1926; Vygotsky, 1934), it appeared to me that research into autism, of more recent times, has failed to give sufficient attention to *language* despite Kanner’s advice and some notable work demonstrating the importance of language in the context of talk-in-interaction and narrative writing in autism (Adams et al., 2002; Barnes et al., 2009; Begona, 1996; Brown, 2010; Brown and Klein, 2011; Chew, 2005; Chew, in (Ed.) Osteen, 2008; Dobbinson et al., 1998, 2003; Flower, 1979; Happé, 1995; Kanner, 1946; Lakoff, 1987, 1993, 2009; Lakoff and

Nunez, 2000; Local and Wootton, 1995; Mayes and Calhoun, 2003a, 2003b, 2006, 2007, 2008; Maynard, 2005; Muskett et al., 2010; Norbury, 2005; Nordquist, 2011; Ochs et al., 2004; Ochs and Solomon, 2004, 2010; Quayson, 2010; Rundblad and Annaz, 2010; Sacks, 1995; Smith-Myles et al., 2003; Solomon, 2008; Sterponi, 2004; Sterponi and Fasulo, 2010; Stribling et al., 2007; Tarplee and Barrow, 1999; Dobbinson et al., 2003; Stribling et al., 2006; Wells and Local, 2009; Wearing, 2010; Wootton, 1999, 2002).

In this chapter I shall begin by setting out some of the key aspects of my thought process in deciding on autistic language methods as the subject matter of this thesis. Then, before moving on in Chapter II to describe my philosophical and methodological positioning, I want to comment on terminology in autism and the ongoing debate as to whether autism is a 'disability' or a 'difference'. It is important for me to explain my position on autism terminology because the use of certain terms can be controversial and I want to explain why I feel I have to use some terms and why I seek to avoid using others wherever possible. I discuss my attitude towards the question of whether autism is a disability or a difference as one of the themes running through my investigations is an objective to ascertain, by means of comparing autistic language methods with non-autistic language methods, if specific features of the former (if any) are indicative of linguistic difference or disability in autism.

The genesis of this thesis

When one attends an autism awareness raising workshop or reads an introduction to autism mention will inevitably be made of the three 'leading' theories of autism: theory of mind, executive dysfunctioning, and weak central coherence. I shall discuss, and fully reference, all three (and various other theories that attempt to explain autism) later on but for now will just provide a brief, sparsely referenced, summary as an introduction. In essence, there are two

varieties of theory of mind which suggest either that people develop an understanding of other minds through developing a folk psychological ‘theory’ about others’ desires, emotions, beliefs etc. (which goes under the rather odd name of ‘theory theory’) or achieve that understanding of other minds by simulating the affective states of others (simulation theory). Given the speed at which social interaction take place I find it very difficult to believe that a neurotypical (NT) person has time for this sort of thing and find the theory of mind hypothesis – whether involving theory production or simulation or a bit of both – unconvincing. In taking this stance I am following Peter Hobson, Daniel Hutto and others. There would appear to be as much potential for difference in executive functioning as between individuals on the NT ‘spectrum’ and individuals on the autism spectrum as can be the case between individual autistics on the one hand and between individual NT people on the other. So the executive dysfunctioning hypothesis does not ring true for me. Frith and Happé, the originators of the weak central coherence hypothesis, no longer propose a weakness in holistic thinking in autism as concomitant of a strength in detailed thinking, only a preference for the latter; so this hypothesis appears to me to suggest that a high-functioning person with autism – with an ability to analyse detail beyond that which is usually seen even in high-functioning NT people together with an aptitude for seeing holistically – *may have the cognitive capacity to be a better thinker than an equally high-functioning NT individual.* So I think there is a need to look beyond the three ‘big ideas’ of autism theory for an adequate explanation of autism, especially when one considers that *the sensory sensitivities often associated with autism cannot be properly explained by any one of these theories or even a combination of them.*

As I have already drawn attention to, although it is generally understood that autism is a developmental disability affecting social learning, current theories aimed at explaining the

nature of autism appeared not to fully reflect this general understanding, especially the essential *social* aspects of autism. Given that typically developing human beings become fully socialised through learning a first language, it appeared to me that insufficient attention had been given to the role of *language* in autism. So much autism research presupposes that one or other, or a combination, of the three dominant cognitive theories of autism, as Rajendran and Mitchell (2007) refer to theory of mind, dysexecutive functioning and weak central coherence, provides an adequate explanation of autism. Is this correct?

One of the two pioneers of autism research – Leo Kanner – wrote that ‘Among numerous other features, the peculiarities of [autistic] language present an important and promising basis for investigation’ (Kanner, 1946, p. 242). The other pioneer – Hans Asperger – stated that children with the syndrome that bears his name ‘have a *special creative attitude towards language*. They are able to express their own original experience in a *linguistically original form*’ (Asperger, 1944, in (Ed.) Frith, 1991, pp. 70/71, my italics).⁵ Some scholars even argue for a link between *creativity* itself and autism (Fitzgerald, 2008), let alone linguistic originality and autism. A less well-remembered author – Gerhard Bosch – undertook a clinical and phenomenological-anthropological investigation of autism in which he was guided by language (Bosch, 1970). Newman, paraphrasing Wittgenstein, and quoting Keightley, McGinn and Pitcher, writes that:

Language is ... seen as a part of the social whole, consisting of both verbal and non-verbal behaviours in specific contexts, in particular times and places ... Here, language is ‘not *added* to social life to facilitate communication, as though language were simply a *means* to express something apart from itself’ (Keightley, 1976, p. 46); rather language is recognized as a natural development of human behavior; indeed that it is *itself* behavior (McGinn, 1984, p. 42), where ‘linguistic and nonlinguistic behavior are woven together into an intricate organic whole’ (Pitcher, 1964, p. 240)

⁵ Asperger went on to suggest that the linguistic originality he had noted was due to the originality of their experiences, writing that ‘Autistic children have the ability to see things and events around them from a new point of view, which often shows surprising maturity’ (Asperger, 1944, in Frith, 1991, p. 71). This ability to see things differently could explain a more general creativity in autistic children (which could last into adulthood).

(Newman, 1996, p. 301, authors' italics).

Wooffitt's view is that 'Given the importance of communication ... it might be expected that the study of language is at the heart of the sociological enterprise. But it is not, and never has been.' (Wooffitt, 2005, p. 22).⁶ Heritage points out that 'In his stress on the indexical, and hence interpreted, nature of natural language descriptions Garfinkel sought to focus sociological interest on a grievously neglected topic – the nature of language use and of the practical reasoning which informs it' (Heritage, 1984, p. 135). Two elements of the 'triad of impairments' in autism are social interaction and social communication, delay in developing language is an essential of classic autism, and, even though it is not part of the relevant diagnostic criteria, Asperger's syndrome (AS) is generally regarded as involving similar pragmatic language difficulties to autism (de Villiers, Stainton and Szatmari (2007) consider that the pragmatic language difficulties associated with the autism spectrum relate primarily to so-called secondary pragmatic processes)⁷. Hence it seems to me that it might be expected that the study of autistic language would be a key feature of the project to understand autism. I have already pointed to Kanner's advice that autistic language should be investigated. Gerhard Bosch clearly agreed with Kanner as he used language as a "guide" when undertaking his investigation into infantile autism (Bosch, 1970)⁸. But, more generally, the study of autistic language has taken a back seat to investigations of things like false beliefs; for instance Jurecic draws attention to the fact that 'no current research can explain precisely

⁶ Whilst the study of language has not been core to the mainstream sociological enterprise it has been at the centre for ethnomethodologists. It intrigues me to note that an area of sociological methodology that began as outsider methodology and seemingly has still to become mainstream focuses on language without which society would be a very different animal and sociology could not even exist!

⁷ According to de Villiers, Stainton and Szatmari, primary pragmatic language processes 'take the standing meaning of expressions as input ... and yield the literal content of the speech act as output' (de Villiers, Stainton and Szatmari, 2007, p.312) whereas secondary pragmatic language processes 'take the proposition literally stated as input, and yield propositions that are non-literally conveyed' (ibid., p. 312). For them, secondary processes are greatly affected in autism and AS but primary processes are relatively intact (ibid.).

⁸ Hobson has written that Bosch's 'sadly neglected' (Hobson, 1993, p. 76) account of infantile autism is 'One of the most refined clinical-cum-theoretical accounts' (ibid., p. 76). It is infrequently referred to nowadays.

why and how people with Asperger's communicate differently than do neurotypical writers' (Jurecic, 2007, p. 427); in my view her comments can be applied to the full spectrum of autism and to talk as well as to writing. Eigsti et al., in drawing attention to the lack of research into communicative language in autism, suggest that it may be due to researchers having 'attributed language delays primarily to the *lack of social interest or reciprocity*' (Eigsti et al., 2011, p. 682, my italics).

In my view it is at least as important to undertake in-depth analysis of autistic language than to figure out which parts of the brain are involved in autism: and I agree with Wooffitt that to understand utterances 'we need to explore not the operations of neurons and blood flow in Broca's area, but the interactional tasks for which it has been designed' (Wooffitt, 2005, p. 21). Following Wittgenstein, I believe that language and social practices are linked inextricably in that each requires the other (Wittgenstein, 1958). As Jost writes, 'In [Wittgenstein's] account, the measure of a person's social and cognitive development is likely to be the degree to which she or he engages in the institutionalized language-games⁹ of the culture' (Jost, 1995, p. 15). This suggests to me that developmental delay in autism – involving, as it does, social interaction and language – is a clear indication that Wittgenstein's social psychological viewpoint was right and that autism clearly demonstrates what happens when a person's ability to participate in the language-games of the culture they live in develops atypically. This thesis majors on the relevance of language-games for autism.

These introductory paragraphs demonstrate why I am fascinated by language in autism and wanted to try and make a contribution to an understanding of autistic language methods. My investigation is based on the work of researchers who have studied autistic talk-in-interaction

⁹ I discuss Wittgenstein's 'language-game' concept in a later chapter along with the associated concept of a 'form of life'.

from the conversation analytic perspective that aligns with my philosophical position (e.g., Adams, Green, Gilchrist, and Cox , 2002; Dobbinson, Perkins, and Boucher, 1998, 2003; Ochs et al., 2004; Ochs and Solomon, 2004, 2010; Sterponi and Fasulo, 2010; Wootton, 1999, 2002) and the narrative writing ability of autistic persons (e.g., Barnes et al., 2009; Brown, 2010; Brown and Klein, 2011; Mayes and Calhoun, 2003a, 2003b, 2006, 2007, 2008; Quayson, 2010; Smith-Myles et al., 2003). In carrying out the research for this thesis it was my intention to: (1) attempt to develop a synthesis of current knowledge of autistic language methods as a practical framework to guide future research focused on language in autism, (2) develop a synthesis of existing theoretical work on autism, and (3) investigate the grounding of autism theory in my language methods data. To those who might object to my integration of psychological understandings of autism with a review of autistic writing I note Patrick McDonagh's reference to Judith Ryan having shown that 'empiricist psychology and literature experienced an "extraordinary symbiosis" in the first decades of the twentieth century' (McDonagh, in (Ed.) Osteen, 2008, p. 101)¹⁰; a historical period which led, not only to Asperger and Kanner, but also to Beckett, Joyce, Kafka, and Wittgenstein.

My position on autism terminology

As the next (and final) section of this chapter is a brief consideration of the ongoing debate as to whether or not autism is a disability or a difference (in cognition and socialisation) I wish, first, to clarify my position on the use of certain autism terminology. Terms such as 'autistic' and 'disability' feature in this thesis mainly because they are in common use (e.g. National *Autistic Society* and *Disability Discrimination Act*), or have been used by authors I have referred to and cannot be avoided. The distinction between the terms 'impairment' and 'disability' is crucial to an understanding of the medical and social models of disability. And

¹⁰ Patrick McDonagh's articles on autism and modernism are marked "do not cite without permission of the author". I have sought Dr. McDonagh's permission to cite his articles but, unfortunately, the email address listed by his university appears to be incorrect and the university is unable to contact him on my behalf.

the standard diagnostic manuals refer to autism as 'autistic *disorder*'. However, use of certain terms in autism, even terms in common usage, may upset some readers (whilst, perversely, gaining the approval of others). For instance, some people with so-called Autistic Disorder (DSM-IV) (APA, 1994), object to the word 'autistic' preferring 'person with autism' to avoid the implication that their autism fully defines an autistic person. On the other hand, other autistics¹¹ prefer 'autistic' to 'person with autism', because person-first language is often adopted for characteristics considered negative (Sinclair, cited in Bagatell, 2010).

The term 'neurodiversity' was coined to assert that atypical neurological development is a normal human difference to be recognised and respected. Those using this term refer to the dominant mode of thinking as neurotypical thinking. Harvey Blume has written that:

The consensus emerging from the Internet forums and Web sites where autistics congregate ... is that (neurotypical) is only one of many neurological configurations - the dominant one certainly, but not necessarily the best. (Blume, 1997, np)

For me, the term 'neurodiversity' gives the impression that 'neurotypical' people are 'normal' (whatever that is). I much prefer, and from now on will use, Luke Beardon's term 'predominant neurotype'¹² (PNT) which makes the point that there are simply more non-autistics than autistics whilst implying a range of equally valid, neurotypes.

¹¹ I have been criticised by the authors of a paper I critiqued for using the plural term 'autistics' but, following Wolman and many others, I shall continue to do so (Wolman, 2008).

¹² Beardon used the term 'neurotypical' in his doctoral dissertation 'to avoid as far as is possible any suggestion that there is such a state as 'normality' or that individuals with AS are in any way 'abnormal'' (Beardon, 2008, p. 181). However, he feels (as I do) that 'neurotypical' retains a suggestion of being 'a lesser individual' (ibid., p. 181). Following a friend's suggestion, Beardon proposed the alternative term 'predominant neurotype' (PNT) which describes the population it relates to accurately and differentiates it from the autistic population.

I am conscious of what Rubin describes as a ‘rift in the autism community ... between what we label high-functioning and low-functioning people’ (Rubin, cited in Bagatell, 2010, p. 46) given that the lives of low-functioning autistics can be very different to those who are high-functioning. Bagatell quotes a parent of a low-functioning autistic child who writes that:

The ‘differing abilities’ of persons with Asperger Syndrome are nothing like my daughter’s autism ... I have not met a person with Asperger Syndrome who seemed anything like my daughter ... It is hard to consider her ‘differently abled’ because she is not ‘abled’.
(Singer, cited in Bagatell, 2010, p. 45)

I advocate neurological pluralism but not at the cost of discounting or ignoring *anyone’s* experiences. And I do not want to be guilty of what I call *insider discrimination*¹³ where one group of autistic people unknowingly discriminate against another group of autistics.

I have a particular dislike of the term ‘high-functioning autism’ (HFA), my reasoning being that (1) it gives the impression that *autism* itself can be high-functioning when it is the *individual* who is high-functioning (or low-functioning, although low-functioning autism is not a term in regular use for some reason), and (2) its use may tend to perpetuate confusion between autism and intellectual disability. I prefer ‘high-functioning person with autism’ even though less succinct and person-first!¹⁴ I shall continue to use the acronym HFA but, for me, it stands for *High Functioning person with Autism*¹⁵, not high-functioning autism.

There is no, and probably can never be, agreement amongst persons with autism as to usage

¹³ Insider discrimination is my own term for the unintentional discrimination that can occur between people with less of a particular ‘disability’ and those with more of that same disability. See also page 16.

¹⁴ Smukler and Ferguson refer to ‘people with autism labels’ to stress that autism is socially constructed. This is another occasion when person-first language may be preferable. (Smukler and Ferguson, 2005).

¹⁵ A search for academic work incorporating the phrase ‘high functioning person with autism’ produces just 22 items whereas searching on ‘high functioning autism’ produces 12,200!

of apparently derogatory terms such as ‘impairment’ and ‘disorder’. I wish to make it clear that I use these terms, as with autism terminology more generally, simply because they are common parlance. My use of a term does not signify any particular attitude towards it.

Is autism a ‘difference’ or a ‘disability’?

Many autistics now regard autism as a cognitive *difference*. Wolman states that:

Autistics ... are now leading a nascent civil rights movement. This movement is being fuelled by a small but growing cadre of neuropsychological researchers who are taking a fresh look at the nature of autism itself. The condition, they say, shouldn't be thought of as a disease to be eradicated. It may be that the autistic brain is not defective but simply different — an example of the variety of human development. These researchers assert that the focus on finding a cure for autism — the disease model — has kept science from asking fundamental questions about how autistic brains function. A cornerstone of this new approach — call it the difference model — is that past research about autistic intelligence is flawed.

(Wolman, 2008)¹⁶

The debate over whether autism involves a ‘disability’ or a ‘difference’ will not be resolved any time soon. The main diagnostic manuals refer to both Kanner’s autism and AS as ‘disorders’ but then, being productions of the medical community, this is inevitable and means no more than that medical practitioners deal in disorders (APA, 2000; WHO, 1993). Molloy and Vasil, cited in Madriaga et al., regard AS as a social difference rather than a disability (Madriaga, 2008; Molloy and Vasil, 2004). The noted autism researcher Simon Baron-Cohen considers that ‘the term ‘disability’ only applies to the lower functioning cases of autism; but that (it) may need to be retained for AS/HFA as long as the legal framework only provides financial and other support for individuals with a disability’ (Baron-Cohen, 2000, p. 1). Whilst I have to agree that a diagnosis may often, regrettably, be a bureaucratic

¹⁶ Wolman, D. (2008). *The truth about autism: scientists reconsider what they think they know*, Wired Magazine. [online] Last accessed 2 June 2010 at: http://www.wired.com/medtech/health/magazine/16-03/ff_autism?currentPage=2

necessity (whilst diagnosis is no guarantee of support, the absence of a diagnosis virtually guarantees that support will be absent), I quote Baron-Cohen because he appears to consider that autism can be either a difference *or* a disability. Baker is another example of a writer hedging their bets by referring to both neurological difference *and* neurological disability (Baker, 2006). This difficult issue of disability versus difference is complicated still further when an intellectual disability (difference?) is also involved.

But does the neurodiversity view of autism as a difference risk losing sight of the fact that at least 30% of those with autism have intellectual learning difficulties in addition to their social learning difficulties (Estes et al., 2010)? Individuals propounding the neurodiversity 'difference' perspective on autism are, with few exceptions, high-functioning autistics. In his doctoral dissertation on narratives of difference and disability in AS, Neil Shepard touches on the matter of the presentation of AS in the media as follows:

The proto-typical Aspergian persona represented dominantly in the media is often both intelligent and successful. At the same time, these personas are also so often masculine, middle/upper class and white. These representations are problematic in the way that they create uphold (sic) traditional normalcy in terms of gender, race and class, reify stigma toward other points on the autistic spectrum and create certain stereotypic expectations of what Asperger's syndrome is for those with the diagnosis that may not always reflect their life situation.

(Shepard, 2010, p. 2)

I am conscious of having referred to the possibility of autism being a difference whilst being less clear about the status of intellectual difficulties. Mark Rapley has argued that intellectual disability is a social construction, writing that 'Intellectual disability is ... not a thing-in-the-world awaiting discovery, but rather is a disreputable moral status socially constructed, by

psy¹⁷, as a speakable truth about such persons' (Rapley, 2004, p.208). Rapley acknowledges differences in intellectual levels between people but objects to the division of humanity into people with or without an intellectual disability, writing that:

If the notion of 'intellectual disability' must be retained¹⁸ – and, given its conceptual emptiness and the tautological 'explanation' of 'incompetence' it offers¹⁹, I would argue for its abandonment – then ... an explicit recognition of the inescapably moral nature of the category, and its inextricable binding to the project of the governing of souls is an essential starting point.
(ibid., p. 209)

Whilst the debate in my field is largely between whether autism is a disability or a difference, Rapley appears to argue that intellectual disability is a socially constructed, *false category* (ibid.). One wonders what Rapley would make of autism (he makes no mention of it and does not distinguish intellectual learning difficulties from social learning difficulties). My view is that in his argumentation concerning intellectual disability Rapley probably takes social construction too far; I regard intellectual and social learning difficulties as objective concepts, albeit historically and culturally situated and hence social constructions *in part*.

But where does all this leave the debate over whether social *and* intellectual learning difficulties amount to difference or disability? As no-one can adjudicate on the matter of disability versus difference all I shall do is state my concern – echoed by Shepard – that a false stereotype of AS has the potential to “reify stigma toward other points on the autistic spectrum” with the possibility of unintentional discrimination against other persons with autism. It is my view that the difficulties learning the social ‘ropes’ associated with autism

¹⁷ By 'psy' Rapley is referring to the psychology establishment.

¹⁸ Rapley accepts that the category may have to be retained for practical reasons (relating to the provision of support for instance) as I have already acknowledged in relation to autism.

¹⁹ The tautological explanation of incompetence Rapley refers to is, I think, the circular reasoning that a person is considered intellectually disabled because they fail to pass an IQ test but, in another breath, is considered to have failed the IQ test because they are intellectually disabled!

can often cause *more* problems for an individual than a so-called intellectual learning disability; the following comments from Portway and Johnson on some of the risks associated with autism suggest something more than just 'difference' to me.

Everyday risks arising from the perception of others include being misunderstood, ridiculed, teased, exploited and ostracised. Longer term risks include underachievement, prolonged dependency upon parents and risks to psychological and emotional well-being. Almost all participants with AS were to some degree unhappy, anxious and depressed. A few even discussed suicide as the ultimate way of 'opting out', highlighting the significant risk to long term mental health ...

(Portway and Johnson, 2005, p. 74)

The counter-argument from Luke Beardon goes as follows:

People with autism are not disordered (the irony with the term being that so many people with autism are highly ordered in their thinking), nor should we automatically dismiss developmental differences as impairments. Certainly the neurological complexities can be baffling to the NT - as, equally, the NT world is baffling to the individual with autism. This does not make either or both populations disordered - simply, different.

(Beardon, 2007, p. 3)

I would like to agree with Beardon on the matter of autism as difference (we do not often disagree on matters of any importance to autism) but on this occasion I am unable to, believing as I do that in autism difference often shades into disability and that to deny this fact carries risks highlighted by none other than Erving Goffman. Goffman wrote of unintentional discrimination by some people in a social 'group' against others in the same group (which he called 'stratification' (Goffman, 1963, p. 131) of stigma) as follows:

The stigmatized individual exhibits a tendency to stratify his 'own' according to the degree to which their stigma is apparent and obtrusive. He can then take up in regard to those who are more evidently stigmatized than himself the attitudes the normals take to him. Thus do the hard of hearing stoutly see themselves as anything but deaf persons, and those with defective vision, anything but blind.

(Goffman, 1963, pp. 130/131)

If the aspects of the language Goffman used (fifty years ago) that we now find unacceptable are ignored, he makes the important point that persons with ‘less’ of a disability may, unknowingly, discriminate against those with ‘more’ of that disability²⁰. I do not suggest that persons with autism advocating the ‘difference’ perspective are *knowingly* discriminating against others with autism, but believe that the neurodiversity perspective on autism risks the *insider discrimination* Goffman may have had in mind. Nevertheless, I remain in somewhat of a quandary over whether it really is the case that advocating for neurodiversity and autism as difference involves a potential for stratified stigma or whether in writing of such things as “difference shading into disability” it is *me* who is guilty of what Goffman was getting at when he wrote ‘It is in his affiliation with, or separation from, his more evidently stigmatized fellows, that the individual’s oscillation of identification is most sharply marked’ (ibid., p. 131). This issue remains the cause of some ‘anguish’ to me. In the absence of a resolution of the matter, I try to adopt an inclusive approach to my research to reduce the risk of insider discrimination, and leave the subject by posing a question: if one accepts Rapley’s view that intellectual disability is a “socially constructed, false category” could the same be said of autism?²¹ Acceptance would solve the difference versus disability debate at a stroke!

Having now set out the genesis of this thesis and my attitudes to (1) the use of certain autism terminology, and (2) the issue of whether autism is ‘difference’ or ‘disability’ I am now ready to explain the philosophical and methodological positioning that underpins my research, illuminates my data, and which has given me the means by which to find my voice in my field, to situate the place from which I am speaking, and enable my contribution to the field to be evaluated (Gulson and Parkes, in (Eds.) Thomson and Walker, 2010). I agree with

²⁰ Where a person has autism and an intellectual learning disability then, strictly speaking, in Goffman’s terms, I think there are two separate sources of potential stigmatisation. But, if such a person is seen as an *individual* first and foremost, I cannot see how the two sources can be separated in practice.

²¹ I have already stated my position on this which is that there are both objective and subjective elements to both intellectual learning difficulties and social learning difficulties.

Gulson and Parkes that there is a dialectic in play between theory and the theorist i.e., ‘Theory isn’t simply adopted and applied. In the act of mobilising theory we are also adopted by the theory, as another of its conduits into discourse. Thus, the work of theorising, and of adopting a theoretical lens, *constructs the scholar* as much as it illuminates the data’ (ibid., p. 82, my italics). So, hopefully, the outline of my philosophical and methodological positioning in the next chapter will enable readers to gauge this ‘construction’!

My primary areas of interest reflect gaps in current research

In my view the habitus²² of a person with autism – apart from being affected by everything that can affect habitus in anyone is also affected by their being autistic, their being aware of being autistic or not being aware, and *significant others being aware of their autism or not being aware*. Why might this be important? To the best of my knowledge, the only research into autism undertaken from a Bourdieuan perspective – considering life worlds and practical logic as well as habitus – has focused on the *habitus of significant others* in the life worlds of autistics, not on the habitus of the autistics themselves. I can find absolutely no research that directly confronts the habitus of autistic people which must surely be the most important aspect of habitus in autism.²³ In Chapter III I review the concept of habitus in detail. The major sections of this thesis – Chapter V on autistic talk-in-interaction and Chapter VI on autistic narrative writing – discuss matters that relate to the habitus of persons with autism.

I subscribe to Barry Prizant’s view, which, although expressed nearly thirty years ago now, I believe still to be true, that ‘the lack of a cohesive theory of language acquisition and

²² To explain his notion of the habitus Bourdieu writes of a dialectic between ‘social structures and structured, structuring dispositions through which schemes of thought are formed and transformed’ (Bourdieu, 1980, p. 41) whereby social structures influence an individual’s dispositions which influence the structures themselves.

²³ I refer to habitus in autism rather than to autistic habitus as there is no such thing as the latter, any more than there is a PNT habitus; all people are different with their own individual habitus whether autistic or PNT. Of course, there are probably family resemblances between some aspects of the habitus of PNT people that do not appear in the habitus of autistics; this is likely to be a reason for autistics not ‘fitting in’ to PNT culture.

communicative behavior in autism is striking' (Prizant, 1983, p. 296). Prizant adds that 'The problem, which has apparently eluded the attention and concern of many researchers, is that a "deficit-checklist" orientation hasn't taken us very far in understanding communicative behavior of autistic persons' (ibid., p. 296). I wish to contribute toward the development of a better understanding of autistic language methods and of communication in autism more generally *although by identifying and describing such methods rather than by developing theory*. I felt that the most appropriate contribution I could try to make to autism research would be to develop a theoretical foundation for a programme of research on *autistic language methods* as an outline framework for future research in autism that uses language as a 'guide' to developing a better understanding of what it is to be autistic: because language is as important to interpersonal relatedness as interpersonal relatedness is to autism (Asperger, 1944; Bosch, 1970; Hobson, 1993, 2004, 2009; Kanner, 1943, 1946; Prizant, 1983). In response to Kanner's recommendation to investigate language in autism (1946), and Prizant's imperative (1983), my aim is to contribute towards an understanding of the essence of autism based on a provisional typology of autistic language methods *focused as much on the strengths in autism as on the weaknesses* (but not underestimating the latter).

Although my primary interest lies in adult autistic talk-in-interaction, the miniscule amount of transcribed adult autistic CA forced me into including all ages in order to produce an acceptable volume of data for review. In the end this proved not overly disadvantageous in the context of my objective to identify specific features of autistic talk-in-interaction reflecting autism as certain features were likely to be more noticeable at the younger ages; indeed, it seemed to me that considering talk-in-interaction from the young child to the adult would, in theory, improve my ability to begin to see developmental aspects of language method use in what, after all, is a developmental disability. Nevertheless, the quite small

amounts of available adult talk-in-interaction reduced my capacity to view language methods throughout the developmental period. The review reported on in Chapter V is an attempt to bring together in one place a summary of the findings of autism researchers using CA. The research questions relating to talk-in-interaction and narrative writing (see page 89) refer to autistics generally without any age limitations; these particular questions would have been more specifically targeted on adult autistics had there been a sufficient corpus of adult autistic CA with which to work. Whilst this original focus was primarily a reflection of my interest in the manifestation of autism in adults, it would also have facilitated comparison between the talk-in-interaction and narrative writing given that the writers reviewed are all adults!

CHAPTER II

PHILOSOPHY AND METHODOLOGY

Durkheim tells us: 'The first and most fundamental rule is: Consider social facts as things.' And Weber observes: 'Both for sociology in the present sense, and for history, the object of cognition is the subjective meaning-complex of action'. These two statements are not contradictory. Society does indeed possess objective facticity. And society is indeed built up by activity that expresses subjective meaning. And, incidentally, Durkheim knew the latter, just as Weber knew the former. It is precisely the dual character of society in terms of objective facticity and subjective meaning that makes its 'reality *sui generis*'.

(Berger and Luckmann, 1966, p. 30, author's italics)

social strategies are never determined unilaterally by the objective constraints of the structure any more than they are by the subjective intentions of the agent. Rather, practice is engendered in the mutual solicitation of position and disposition, in the now-harmonious, now-discordant, encounter between social structures and mental structures, history objectified as fields and history embodied in the form of this socially patterned matrix of preferences and propensities that constitute habitus.

(Wacquant, cited in Lizardo, 2004, p. 391)

Having explained the genesis of this thesis and clarified my position on various aspects of terminology in autism I can now explain the philosophical and methodological positioning that anchors my research and sheds some analytic light on my data. This current chapter includes a response to the potential criticism I would face if I fail to justify my involvement with theory despite bringing a Wittgensteinian perspective to my work, and a detailed justification of the use of a variety of different, but I argue conceptually linked, theoretics (e.g., symbolic interactionism, ethnomethodology, narrative analysis, and grounded theory).

In the latter respect this chapter is in preparation for more detailed consideration of the links between autism and ethnomethodology (in Chapter III) and a more detailed discussion of the relevance to autism of CA rooted in ethnomethodology (in Chapter IV).

Empirical science is a system of acquiring knowledge that rejects all a priori knowledge, relying solely upon observation, experimentation, and induction. This thesis is not an empirical, sociological study (or any other kind of empirical study) but a piece of philosophical inquiry taking as its data existing empirical research in the areas of linguistic anthropology and psychology (where I focus on autistic language methods) and existing theoretical development work (where I focus on autism theory). In philosophy, analysis involves the breaking down of a coherent whole into elements or components whereas philosophical synthesis works in the opposite direction by combining separate elements or components to form a coherent whole. Whilst I shall try to avoid the “pitfalls” referred to by Gulson and Parkes, it is not my intention in this thesis to “construct analysis”. This is not a work of analytical philosophy; rather it is intended to be a *philosophical synthesis* of existing empirical linguistic analysis (the focus on autistic language methods) and of existing autism theory (the focus on autism theory). Incidentally, I have no doubt that Gulson and Parkes would apply their strictures to synthesis as much as to analysis. Although my aim is to produce a piece of synthetic philosophy, I am well aware that there can be no such thing as pure synthesis (or pure analysis for that matter), Riemann cited in Ritchey writing that:

Purely synthetic and purely analytic research, when taken in the precise sense of these terms, is an impossibility. Every synthesis rests upon the results of a preceding analysis, and every analysis requires a subsequent synthesis in order that it may be confirmed or corrected with reference to experience.
(Riemann, in Ritchey, 1991, p. 16)

This philosophical treatise is influenced by scholars from a variety of disciplines (e.g., philosophy of mind and language (John Searle and Ludwig Wittgenstein), anthropological / cognitive²⁴ sociology from a scholar with a tendency toward the theoretical (Pierre Bourdieu), linguistic anthropology (Elinor Ochs' and her team at the University of Southern California), psychological anthropology (Olga Solomon and Nancy Bagatell), social psychology (the symbolic interactionism of George Herbert Mead and his student Herbert Blumer), and ethnomethodology/CA (Harold Garfinkel, Harvey Sacks, Emanuel Schegloff, and Gail Jefferson)); some of which may not be 'traditionally' linked. I set out my justification for linking concepts from this miscellany of disciplines later in this chapter. But, before doing so, it is worth pointing out that disciplinary boundaries are breaking down to the extent that Delanty can now write that there are often greater differences in positioning and alignment *within* individual disciplines than between them (Delanty, 2005) and that 'social scientists are reaching across the borders of the old disciplinary boundaries' (ibid., p. 7).

Wittgenstein has heavily influenced my thinking. Although I do not engage in the development of theory myself I do intend, as previously stated, to undertake a piece of philosophical synthesis in relation to autism theory developed by other scholars; in view of this it is incumbent upon me to discuss the sense in which Wittgenstein set his face against theorising and why I believe that the work I have undertaken for this thesis is not in breach of the philosopher's strictures in this regard. He did not preclude the creation by the sciences of empirical theory but did deny that doing so is the business of the philosopher. So I consider that it is consistent to advance an empirical theory *and* endorse Wittgenstein's general view of philosophy. However, I am not advancing yet another empirical theory about, say, the cause or essence of autism (there are plenty of these already). So in the relevant sense of

²⁴ Lizardo describes Bourdieu's work as 'through and through a *cognitive sociology*' (Lizardo, 2004, p. 394, author's italics) informed, inter alia, by the 'psychological genetic structuralism of Piaget' (ibid., p. 376).

'philosophical' theory Wittgenstein appears to exclude the possibility of part of what I am attempting to do i.e., develop a philosophical synthesis of theory. (Actually, Wittgenstein would not categorically state that this is excluded as he does not set out hard and fast rules of this nature; his approach would be to show that putting forward such a 'theory' is pointless as, when looked at more closely, it would be seen to be unworthy of being called theory.)

But *should* we theorise autism?

Habermas has written that: 'Wittgenstein, if I am not mistaken, did not offer any justification for his abstention from theory' (Habermas, 2001, p. 64). Habermas is mistaken in my view, Wittgenstein's justification of the grammatical investigation method for philosophical problems (as opposed to empirical problems) being quite clearly set out as follows:

we may not advance any kind of theory. There must not be anything hypothetical in our considerations. We must do away with all explanation, and description alone must take its place. And this description gets its light, that is to say its purpose, from the philosophical problems. These are, of course, not empirical problems; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: in despite of an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known. Philosophy is a battle against the bewitchment of our intelligence by means of language.

(Wittgenstein, 1958, § 109)

What may *appear* to be a general objection to theorising on the part of Wittgenstein may be a very minor example of the "bewitchment of our intelligence by means of language" that he wrote of because, when taken in context, it is obvious that he is not excluding the possibility of *all* theorizing, simply theorizing by philosophers. This becomes clear for Racine and Muller (and others) when the exhortation not to "advance any kind of theory" is read in context, the context being the immediately preceding passage from the Philosophical Investigations where Wittgenstein writes: 'It was true to say that our [he refers to

philosophers, NC] considerations could not be scientific ones. It was not of any possible interest to us to find out empirically “that, contrary to our preconceived ideas, it is possible to think such-and-such”; notice that he states that philosophical matters cannot be scientific in nature requiring empirical study. So, what may seem at first sight a general dictat to avoid theorising is actually ‘just’ an expression of his attitude that the subject matter of philosophy is that which is conceptual in nature, not that which requires empirical investigation. His view is that it is the province of scientists to explain, that of philosophers to describe (and that by taking steps to avoid being caught up in language-games that “bewitch our intelligence” the philosopher will be in a position to see concepts for what they actually are, not what they may appear at first sight to be when the “workings of our language” cloud the understanding.

But as this thesis is a piece of *philosophical* synthesis rather than an empirical, scientific endeavour how can I justify delving into theory in relation to language methods and language-games, the more so because this aspect of my work has been heavily influenced by ethnomethodology (I shall deal with the synthesis of autism theory separately)? If I was involved in the development of autism theory as a researcher in a scientific field then I could simply say that Wittgenstein had no objection to that; he objected to philosophers undertaking work of an empirical or theoretical nature. But being involved in a philosophical endeavour that encompasses theory it is incumbent upon me to justify myself; I do so by drawing attention to the nature of the theory I concern myself with on the one hand and, on the other, a careful consideration of what Wittgenstein was *actually* dismissive of when he, famously, wrote that ‘And we may not advance any kind of theory’ (Wittgenstein, 1958, §109) and that “We must do away with all explanations, and description alone must take its place’ (ibid., § 109). In my view Wittgenstein, in the words of Coulter, set himself against ‘traditions which encouraged *theorising* as a route to solving intellectual problems in the

human sciences' (Coulter, 1999, p.177, author's italics). In this stance Coulter points out that ethnomethodologists are in agreement with Wittgenstein as both oppose a call to theorise in this situation and, in doing so, explains what he sees as the distinction between inductive and deductive theory and the procedural descriptive explanations adopted in ethnomethodology, writing that:

ethnomethodologists posit *procedural* explanations – they *explicate* how social order is accomplished *in situ*. But *this* enterprise is a far cry from *inductive* (or, especially, deductive-nomological) forms of explanation familiar in the social sciences. Indeed, procedural explanations are coeval with precise descriptions of how members' practices actually *work*, operate, are do-able, account-able, intelligible, and so on. There is no significant, conceptual, conflict here.
(*ibid.*, p. 177, author's italics)

I agree with Coulter's understanding that ethnomethodological indifference is a 'principled indifference to the methods of analysis of the constructive-analysis, positivistic social sciences' (*ibid.*, p. 178) that finds common ground with Wittgenstein's opposition to theorising as he apparently meant it when he said that philosophers should "not advance any kind of theory". My work on autistic language-methods is in the tradition of ethnomethodology, focused as it is on extant Sacks, Schegloff and Jefferson (SSJ)-type CA developed by these ethnomethodologists. It is my avowed aim to develop, if it proves to be possible, a synthesis of existing findings in the corpus of work of conversation analysts working in the ethnomethodological tradition to develop a tentative framework of language methods that may reflect a person's autism which are agreed upon or contested in the field or can be discovered (see page 89 for my list of research questions). I shall not superimpose any theory over this tentative framework of language methods. So, given the clear consistency of the ethnomethodological project with Wittgenstein's strictures, and my promise to refrain from "any theorising" as Wittgensteinian would have it, I contend that my work on autistic language methods is, in following Wittgenstein, suitable for an ethnomethodologically

informed, focus on CA, and that, in taking an ethnomethodological perspective on my work, I am on common ground with Wittgenstein. In essence, this is a philosophical synthesis of theory, not new theory; although other scholars ground theory in CA data, I refrain from theorising as Wittgenstein requires of all those involved in philosophical work, simply engaging in a *philosophical discussion of existing theory*. However, there is a further aspect to this thesis (albeit one that does not feature in its title), namely the focus in the later chapters (Chapters VIII, IX and X) on autism theory where I critique the current ‘standard’ autism theory, discuss alternative theories of potential relevance to autism (some developed as a means of explaining aspects of autism, some developed for other purposes), and begin to suggest how a synthesis of theory can better explain the essence of autism and the autistic language-methods identified as potentially those that may reflect an individual’s autism. How is it acceptable – within a Wittgensteinian frame of reference – to undertake this third project? This is not, apparently, an ethnomethodologically influenced aspect of the thesis and seems far more likely to be at loggerheads with Wittgenstein’s exhortation to refrain from theorising than the work on language methods. But I am not developing any theory, only seeking a creative synthesis of existing theory that I believe will enable a better understanding of the essence of autism; in doing so I accept that I am not adopting an ethnomethodological stance (as I am with the language methods synthesis) but then neither am I undertaking inductive or deductive theorising of my own. My work with autism theory is not itself an empirical, scientific exercise but a philosophical synthesis of existing theory in which I *describe and discuss* existing theory and rearrange what is already ‘known’ in a manner that I contend better enables a description of the essence of autism than existing autism theory. In doing so I am trying to avoid the pitfalls of language that Wittgenstein warned about and which, for instance, make some people think that there is something called theory of mind.

Introducing my philosophical and methodological influences

I believe that the heart of my thesis – that a person with autism has difficulty with language-games – is simply a description of the subjective reality of a person who, *like all people*, ‘is not born a member of society’ (Berger and Luckmann, 1966, p. 149), but who, *unlike their PNT peers*, does not have quite the same ‘predisposition towards sociality (by which) he becomes a member of society’ (ibid., p. 149). However, I do not agree with them that ‘Homo sapiens is always, *and in the same measure*, homo socius’ (ibid., p. 69, my italics²⁵); just think of the many examples of autistic people – the authors reviewed here included – who, although lacking TD social skills, demonstrate wisdom out of all proportion to their social skills. In equating homo sapiens with homo socius do Berger and Luckmann suggest that autistic people may not be fully human? This reminds me that Belmonte, writing about the drive in all human beings to achieve some sense of order out of the chaos of life through narrative – which he thinks can be *heightened* in autism – says that ‘we may describe people with autism as human, *but more so*’ (Belmonte, In Osteen, 2008, p. 177, my italics)!

A theme pervading this thesis is my desire to seek alternative understandings of autism to the predominant biomedical and neurological paradigms that see autism as a list of ‘defects’ caused by genetic abnormalities; although there is substantial evidence in the literature that autism has its origin in genetic difference that affects perception and cognition, my interest in autism relates to the day-to-day impact of differences in perception and cognition on the nature of language and sociality in autism including the reflexive relationship between autistic language and sociality. I have been willing to adopt approaches and concepts from far and wide. As language is the special type of symbol that both enables human beings to think, and facilitates their social interaction, the social interactional aspects of symbolic

²⁵ I have replaced the authors’ italicised highlights (of ‘homo sapiens’ and ‘homo socius’) with my own.

interactionism (SI) provide a sound positioning to inform my research. I am fascinated by the insights into the nature of language and sociality in autism produced by those working from an anthropological perspective (including the concept of ‘autistic sociality’ developed by Ochs and Solomon). Psychological anthropology focuses on the social as well as the psychological in an individual’s experience and place in society (Solomon and Bagatell, 2010). I believe that Wittgenstein’s concept of the ‘language game’ has much to contribute to an understanding of the social difficulties experienced by autistic people (and his ‘form of life’ concept may be relevant too). The Bourdieuan concept of habitus (and Searle’s concept of the Background), considered in conjunction with the maturational delay that is a feature of autism, provide a lens with which to better understand aspects of the differences in autistic sociality. The ethnomethodological dictat to investigate ‘practical sociological reasoning’ and to treat language as a resource for sociological study – which led Sacks, Schegloff and Jefferson to analyse the basic processes underlying talk-in-interaction – provides a basis and technique for research into the language methods of those with autism. Grounded theory – derived directly and inductively from naturalistic data without theoretical preconceptions – would seem to be consonant with an ethnomethodological / anthropological approach to language research aimed at identifying language methods (Lester and Hannen, 1980). In the remainder of this chapter, and elsewhere in this thesis, I have sought to identify other connections made in the literature between the disciplines and concepts referred to here to justify my selections as far as I am able to. It is also worth pointing out that, according to Brantlinger et al. (2005), Merriam considers that the blurring of inter-disciplinary boundaries causes scholars to appreciate that concepts from different disciplines may actually be less distinctive than they often first appear (so for instance, the naturalistic ethnomethodological approach and the associated CA have similarities with inductive grounded theory). In relation to their understanding of Merriam’s views, Brantlinger et al. write that:

As the boundaries between disciplines blur, we have come to realize that distinctive terms have similar meanings. Qualitative, naturalistic, interpretive, field or case study, inductive research, and ethnography often are used interchangeably or to refer to the same methods.

(Brantlinger et al., 2005, p. 196)

Mead and Blumer's symbolic interactionism

Berger and Luckmann write that 'The possibility of "individualism" (that is, of individual choice between discrepant realities and identities) is directly linked to the possibility of *unsuccessful socialization*' (Berger and Luckmann, 1966, p. 190, my italics). Whilst doubting that "choice" is always involved, and preferring *difference* to discrepancy, I agree with them that 'unsuccessful socialization' can lead to different realities and identities. Autism is a particular case in point. As I consider that social interaction lies at the heart of both socialisation and autism and that language is at the heart of social interaction²⁶ I am drawn to theoretical approaches that stress the importance of social interaction and especially those approaches that place a special emphasis on the role of *language in interaction* (Berger and Luckmann, 1966; Blumer, 1969 (particularly, the chapter on the thought of Mead); Charon, 2004; Garfinkel, 1967; Goffman, 1969; Habermas, 1984, 1987, 2001; Schutz, 1962; Wittgenstein, 1958). Hence, I am especially interested in symbolic interactionist theory.

Charon, who I quoted earlier, is a symbolic interactionist. In admittedly simplistic terms, Charon's perspective on the relationship between the individual and their environment (including other human beings) is that each influences the other. In his words:

To the symbolic interactionist we do not simply respond to our environment, but we define, act toward it, and use it. We are not simply shaped, conditioned, controlled by that environment (including other humans), but we act toward it according to our ongoing definitions arising from perspectives that are themselves dynamic.

(ibid., p. 41)

²⁶ Winch, cited in Delanty, and following Wittgenstein, considers that 'our language and our social relations are just two different sides of the same coin' (Winch, in Delanty, 2005, p. 58).

Symbolic interactionism (SI) derives from the thought of George Herbert Mead as interpreted by his students²⁷, the most prominent of these being Herbert Blumer who introduced the term to describe Mead's view of the nature of human society. Mead's approach turned traditional views of the nature of society upside down, Blumer writing that Mead 'reversed the traditional assumptions underlying philosophical, psychological, and sociological thought' (Blumer, 1969, p. 61) in that 'the reliance on symbolic interaction makes human group life a developing *process* instead of a mere issue or product of psychological or social structure' (ibid., p. 67, my italics). According to Blumer, Mead apparently meant, inter alia, that, rather than society being formed in the interplay of psychological factors within the individual and social factors acting on the individual, it is created in a continuous social process informed by these factors and comprising of non-symbolic and symbolic interaction. Non-symbolic interaction involves a person's direct responses to actions and gestures, and symbolic interaction involves them in *interpretation* (the determination of the actions or speech of another person), and *definition* (the specification of desired actions to another person) (ibid.).

Perhaps the most important aspect of SI in relation to autism is this process of interpretation and definition that human beings are constantly engaged in when interacting socially. When involved in joint action 'participants fit their acts together, first, by *identifying the social act in which they are about to engage* and, second, by *interpreting and defining each other's acts in forming the joint act*' (ibid., p. 70, my italics). The identification aspect of this process acts as a form of orientation which provides 'a key to interpreting the acts of others and a guide for directing ... action with regard to them' (ibid., pp. 70/71). But what if a person –

²⁷ Mead did not set out a theoretical scheme of human society as scholars such as Talcott Parsons have done; rather, the implications of his thinking have been passed down by his students, primarily Blumer.

such as an autistic person who struggles with social imagination – cannot identify a particular social act (or fully understand it) and cannot interpret the acts of others (or misses nuances of social interaction and, thus, interprets it differently)? The concept of interpretation in SI appears to me to be crucial in developing an understanding of the consequences of autism for an individual autistic person. Also, viewing the SI scheme from the perspective of autism causes me to wonder why *identification* of social acts is not considered of similar importance to *interpretation* and *definition* in this scheme (only the latter two concepts are highlighted by Blumer). Might this be because Mead and Blumer were PNT scholars and as such would have had no difficulty in identifying the nature of a social act in which they were about to engage and, thus, would not have understood that some people could have difficulty in this respect? In understanding autism from the perspective – analytical lens – of SI I consider it is essential to consider the matter of identification as well as interpretation and definition.

A further important element of Mead's thinking is his attitude towards objects – whether natural or man-made, material or abstract, animate or inanimate, inclusive or narrow, definite or indistinct – whereby 'the nature of an object is constituted by the meaning it has for the person or persons for whom it is an object' (ibid., p. 68), this meaning is not inherent in the object but in how people treat it²⁸, and all objects 'are social products in that they are formed and transformed by the defining process that takes place in social interaction' (ibid., p. 69).

One final point of relevance to autism – and specifically to research methodology – is Blumer's view that 'On the methodological or research side the study of action would have to

²⁸ I note that Blumer interprets Mead's understanding of objects in a somewhat circular manner; after saying that the *meaning* of an object 'arises from how the person is initially prepared to *act* toward it' (Blumer, 1969, pp. 68/69, my italics) he says that 'people are prepared or set to *act* toward objects on the basis of the *meaning* of the objects for them' (ibid., p. 69, my italics). I do not think saying "initially" removes the difficulty in determining which comes first, the act or the meaning. But this is a minor matter; the key point for me being that the meaning of objects is a social construction determined by human beings in symbolic interaction.

be made from the position of the actor (because) action is forged by the actor out of what he (sic) perceives, interprets, and judges' (ibid., p. 73). From an SI perspective, therefore, action involving an autistic person or persons – as with anyone else – could only be understood by gaining an understanding of their perceptions, interpretations, and judgments (and autistic and PNT perceptions, interpretations, and judgments may differ significantly).

In SI the self-concept of an individual human being is developed through a process of *interaction and communication*²⁹ with others; that self-concept being shaped by an individual's perceptions of the reactions of significant others (e.g., for the young child, their parents or carers) and what is referred to in SI as the 'generalised other' (which is the individual's perception of the view that others have of her or him). The generalised perception of the views that others have of an individual creates the 'Me' which combines with the view the individual has of herself or himself (the individual's self-conception or 'I') to create the 'self' (Blumer, 1969, 1980; Charon, 2004). An immediate response to a theoretical perspective that focuses on the development of an individual's self through a process of *interaction and communication* with others, both in a generalised sense and with significant others, is that it seems to have explanatory potential in relation to autism. Autism involves difference from the PNT (when viewed, as I view it, from the perspective of neurodiversity; or disability when viewed from a medical model perspective). This difference arises from an autistic developmental trajectory that differs from the typically developing (PNT) developmental trajectory in the areas of *social interaction and communication* that lie at the heart of SI. A further area of autistic difference concerns *social imagination* which can be described as a difficulty figuring out what other people know or

²⁹ It is important to note that difficulties with social interaction and communication are fundamental to autism; so are difficulties with social imagination which will be referred to shortly.

are thinking, often referred to as ‘theory of mind’ (ToM).³⁰ (Difficulties with social imagination should not be confused with a ‘lack of imagination’ in a general sense i.e., a lesser faculty of imagining, or of forming mental images or concepts of what is not actually present to the senses; only *social* imagination is affected in autism, indeed autistic people are no more or less imaginative in non-social areas than any of their PNT peers, some scholars even arguing for a link between autism and creativity (e.g., Fitzgerald, 2004)). It is not known for certain whether difficulties with social interaction and communication give rise to the difficulties with social imagination or, as the ToM hypothesis has it, vice versa. Nevertheless, few researchers would argue that these three primary areas of difficulty³¹ are not linked closely in some way; hence, I believe that the focus of the SI theoretic on interaction and communication through symbol usage (primarily language) makes it uniquely relevant as an analytic lens with which to view autism. In essence, my view is that the developmental process in autism results, *ceteris paribus*, in existential differences between autism and the PNT whereby the ‘I’, the ‘Me’, and the ‘self’ in an autistic person, are significantly different to the ‘I’, ‘Me’ and ‘self’ in a typically developing (PNT) person.

However, a recent doctoral thesis by Barbara Jacobs questions the applicability of SI as a theoretical perspective of relevance to autism. Jacobs appears to consider that SI ‘ignores’ autism, writing that ‘By making assumptions about communication itself, the part played by social constructivism in autism cannot be fully embraced by (the SI) theoretic’ (Jacobs, 2011, p. 190) which is ‘based on a premise that all human beings have a similar innate

³⁰ In considering social interaction, communication, and imagination I am making reference to the so-called ‘triad of impairments’ from the diagnostic criteria for autism. This may seem at odds with a perspective on autism framed by a belief in neurodiversity, however, I do not dispute that autism affects social interaction, communication, and imagination, but regard these three elements as areas of *difference* from the PNT, not disability. (And, like it or not, I cannot ignore the fact that there *is* a medical perspective on autism.)

³¹ It is arguable that sensory sensitivities in autism are as important as the difficulties with social interaction, communication, and imagination, but, at the time of writing, and despite the emphasis placed on sensory matters by many autistic autobiographers, sensory sensitivity is not part of the standard diagnostic criteria.

communicative capacity. It assumes a normative position' (ibid., p. 190).³² She also suggests that it is debatable whether the second and third of Blumer's premises of SI³³ are applicable to autism because they require social interaction (Jacobs, 2011). I feel the need to respond to the main points made by Jacobs (as I understand them) in rejecting SI as a basis for her thesis to reinforce my selection of the SI theoretic as grounding for my research. In expressing a view that two of the SI premises do not apply to autism, she may have in mind that Blumer wrote that 'Taking the role of the other is a quality of the human being that accompanies symbols, self, and mind in making up the core of what it means to be human. It involves the ability to *take the perspective of others* as we act in the world' (Blumer, 1969, p. 115, my italics). In responding to this, and noting that Blumer had studied autism in depth³⁴, I have to disagree with Jacobs' interpretation of Blumer's writings, (and, of course, despite the importance of his interpretation of SI, this is not the only perspective). Although it can be argued that some scholars come perilously close to denying full humanity to autistic people³⁵ I do not think that Blumer does. In my opinion his thinking on SI is not "based on a premise that all human beings have a similar innate communicative capacity". As a researcher of autism Blumer of all people would have been aware that this is patently not the case. I think he would have challenged Jacobs' reference to an "*innate* communicative capacity (my

³² To me, Jacobs' apparently disapproving reference to the assumption of a normative position suggests a lack of understanding on her part. She appears to regard the SI position as faulty because it assumes normativity but what kind of 'social' existence would not involve the development of social norms in interaction and their appropriation from the generalised other? It may be that, like me, Jacobs dislikes use of the term "normal" in juxtaposition to autism, but that is not quite the same thing in my view.

³³ Blumer's premises of SI are that individuals act towards other people and things on the basis of the meaning these other people or things have for them; and that such meanings are derived from social interaction with other people, and assimilated and modified through a process of interpretation (Blumer, 1969).

³⁴ In 'The Culture of Education' Blumer writes about autism and theory of mind in relation to what he described as the 'challenge of intersubjectivity' (Blumer, 1996, p. 173). He wrote that 'even gifted autists, those suffering from Asperger's syndrome, so-called, are forced into reliance on wooden algorithms and formulas in order to comprehend what people have on their minds or simply have in mind' (ibid., pp. 177-178).

³⁵ For example, Berger and Luckmann write that 'Just as it is impossible for man to develop as man in isolation, so it is impossible for man in isolation to produce a human environment. Solitary human being is being on the animal level (which, of course, man shares with other animals). As soon as one observes phenomena that are specifically human, one enters the realm of the social. Man's specific humanity and his sociality are inextricably intertwined. *Homo sapiens* is always, and in the same measure, *homo socius*' (Berger and Luckmann, 1966, p. 69, authors' italics). How would Berger and Luckmann regard a mute autistic person who has minimal contact with the outside world but is known to be high-functioning?

italics)” because he believed that people’s capacities developed through social interaction; and would not have agreed with her that all people have the same communicative capacity, innate or otherwise, as he was well aware that, in a general sense, and because of differences in social interaction and social imagination, the communicative capacity in autism is not the same as that in the PNT. Just because autistics may not always derive, through the process of interpretation, the same meanings from social interaction as do PNT people³⁶ (or may have difficulty at times in determining meaning at all) does not, in my view, invalidate the premises; conversely, it shows that SI focuses on matters that lie at the heart of autism. The premises of SI do not *require* social interaction, they demonstrate that a symbolic interactionist grounding facilitates an investigation into any phenomenon (e.g., autism) for which social interaction is fundamental. And why would a theoretical position concerning the development of human beings *not* be based on a normative position? Piaget and Vygotsky, for example, both assume normative positions, albeit different positions. Indeed, in my opinion, *it is the very assumption of a normative position by SI that provides a ‘base line’ for investigating autism.* (But I want to make myself absolutely clear here; I am not saying that I think a normative position is in some way superior to any other position – only that there *is* a normative position i.e., the majority (typically developing or PNT) position.)

Finally, Jacobs also tells us that ‘It appears that the basis of SI is the assumed ability in all people to understand the minds and intentions of others. *Therefore, symbolic interactionism is not a suitable vehicle for providing insights in a non-biased and useful study of autistic intelligence, as it privileges the typical researcher³⁷ above the autistic participant*’ (ibid., p. 191, my italics). It is quite the reverse in my view, SI providing a suitable analytic lens for

³⁶ Of course, this cross-neurological argument can be applied in reverse in that PNTs may have difficulty grasping the meaning of interactions with people with autism; the key difference being that generally speaking, by definition, PNTs will have a better grasp of the social norms of interaction than autistics.

³⁷ There is no such phenomenon as a “typical researcher”, however, I presume that Jacobs had in mind a *typically developing (i.e. PNT) researcher* and have responded accordingly.

investigating autism because it highlights the issue at the heart of autism. Her point about assuming an “ability in *all* people to understand the minds and intentions of others” (my italics) also shows a misunderstanding of SI. Whilst I can agree that, due to a greater affinity with social practices, a PNT researcher is likely to be at an advantage in relation to an autistic participant over and above the advantage due to the researcher’s status qua researcher, this situation generally applies *irrespective of the theoretical positioning of the researcher*. In my view, the point to draw attention to is not that SI privileges a PNT researcher any more than any other philosophical positioning privileges them but that, in any research setting, autism places an autistic participant at a disadvantage to the researcher in some respects *and the researcher at a disadvantage to the participant in some respects* because of the cognitive difference between them; this being a cross-neurological matter affecting both parties.

I conclude that SI provides a robust theoretical basis for research into autism; indeed, that there is no more appropriate theoretics in this context, and will now discuss the connections between SI and the other methodological elements involved in this thesis. I can best achieve this by reviewing the key principles of SI as set out by Robson, after Sarantakos (1998):

1. Social life is formed, maintained and changed by the basic meaning attached to it by interacting people, who interact on the basis of meanings they assign to their world; social life and objects become significant when they are assigned meanings.
2. Social life is expressed through symbols. Language is the most important symbol system.
3. The purpose of social research is to study the structure, functions and meaning of symbolic systems.³⁸
4. The most appropriate method of social research is the *naturalistic* method, which incorporates two major procedures, *exploration* and *inspection*³⁹

³⁸ Systems are key to SI in that the self is a system i.e., the ‘I’ and ‘Me’ and the ‘self’ and ‘other’ (‘not-self’) with ‘sociality’ leading to incorporation of the ‘other’ into the personality as the ‘Me’.

³⁹ Blumer writes: “exploration,” as I see it, is to be used in place of studies in which the research scholar has no close familiarity with, or knowledge of, his empirical area of concern. The purpose of exploration is to make sure that his perception of his field and the problem that he sets up are empirically grounded instead of being

(Blumer, 1969; Wallace and Wolf, 1986). Exploration studies new areas, looks for details, and offers a clear understanding of the research question. Any method is useful here. Inspection, on the other hand, is an analytical method and contains a more intensive and more concentrated testing. (Blumer, 1969, called this type of approach *sympathetic introspection*⁴⁰.)

5. Data and interpretations depend on context and process and must be steadily verified and, when necessary, corrected.
6. Meanings are established in and through social interaction. They are learned through interaction and not determined otherwise.
7. Meanings are employed, managed and changed through interaction. (Robson, 2002, p. 197, author's italics)

I have noted certain aspects of these principles that reflect my own thinking i.e., the reference to the purpose of social research being to study symbolic systems (of which the most important by far are languages); mention of a 'naturalistic method'⁴¹ being the most appropriate method of social research (with its echoes of ethnomethodology and CA); the importance of context (noting a link with Wittgenstein's emphasis on meaning being dependent on its context); that interpretations of data must be 'steadily verified' (seeing a similarity with the constant comparison method in grounded theory); and the statement that "meanings are established in and through social interaction" (which links to the concept of social interactionism). It is also important to me that the linguistic constitution of the social is fundamental to SI (Delanty, 2005). Before moving on to consider some of the other theoretics that symbolic interactionists have been willing to work with, and to consider

fashioned out of inadequate or faulty knowledge. "Inspection" is the label I have used for ... the exacting study of the problem that arises out of exploration' (Blumer, 1980, p. 412).

⁴⁰ Esposito and Murphy consider that Blumer's 'sympathetic introspection, at a minimum, requires that instruments be designed to communicate with individuals, variables be socially confirmed, analyses reflect the social logic in place, and findings be subject to critique by those who are studied. Although Blumer does not talk explicitly in these terms, his two-pronged methodology of exploration and inspection is designed to achieve these aims' (Esposito and Murphy, 1999, p. 406).

⁴¹ Blumer wrote that 'By "naturalistic" study I mean the study of conduct and group life as these occur naturally in the everyday existence of people – in the interaction of people as they associate in their daily lives, as they engage in the variety of activities needed to meet the situations that confront them in their day-to-day existence' (Blumer, 1980, p. 412). Conversation analysis is thus a form of naturalistic study as Blumer defined it.

various of Wittgenstein's ideas in conjunction with ethnomethodology and grounded theory I want to stress that my methodology is not 'pure' ethnomethodology, 'pure' grounded theory, or a grammatical investigation, but a synthesis of these various theoretics.

Symbolic interactionism, ethnomethodology, grounded theory, and Wittgenstein

Symbolic interactionists have seemingly been willing to borrow ideas, Fine writing that 'attempts to link interactionism (to other theoretics) all reveal the desire to learn from other intellectually vital sources' (Fine, 1993, p. 66). Referring to the discovery of Mead by Habermas, Fine points out that interactionists have borrowed from and *been* borrowed from (ibid.).⁴² Harré regards 'symbolic interactions' as being at the heart of psychology (Harré, 1992). And one of the founders of grounded theory, Anselm Strauss, sought to develop a social psychology on the basis of a synthesis of elements including SI which involved a 'linguistic model not unlike that of Wittgenstein' (Denzin, 1992, p. 11). In my view the linkages between SI, ethnomethodology, grounded theory, and Wittgenstein's thinking on language provide a warrant for basing my review of autistic talk and writing on a synthesis of these theoretics. In the remainder of this chapter I shall try to make the connections clearer. As Hutto points out, although Wittgenstein stressed the primacy of description in his work it was 'descriptive in a very special sense of the word' (ibid., p. 208), explaining Wittgenstein's position on the role of description in the following manner:

The point is that rather than directing criticisms at specific philosophical proposals with an eye to replacing them with explanatorily superior theories, Wittgenstein targeted the very tendencies towards explanation that lead us to offer hypothetical proposals in advance of properly characterizing and understanding specified domains of interest.
(Hutto, 2009a, p. 208)

⁴² It could also be argued that both Habermas and Mead owe a significant debt to Hegel.

My view is that the grounded theory approach to developing theory – based as it is firmly on accurate descriptions of research data is consistent with Wittgenstein’s position and is indeed an integral element of ethnomethodology – which is entirely data-driven - even though the ‘originators’ of grounded theory (Glaser and Strauss) apparently never acknowledged, or were unaware of, this; Rennie having written that ‘*Ethnomethodology grew up with grounded theory*, unrecognized by Glaser and Strauss’ (Rennie, 1988, p. 114, my italics).

Kathy Charmaz writes that: ‘the term “grounded theory” refers both to a method of inquiry and to the product of the inquiry’ (Charmaz, in (Eds.) Denzin and Lincoln, 2005, p. 507) as it involves guidelines for undertaking research that enables theory to be developed from data, with both the guidance and the theory known, confusingly, as grounded theory. Grounded theory methods involve carrying out data gathering and data analysis in tandem with the data informing the analysis and vice versa; what could be described as a reflexive approach to undertaking research. Floersch et al. write that most grounded theorists agree that the essential elements of grounded theory include: intensive interviewing, various forms of coding, constant comparison, and memo-writing, (Floersch et al., 2010) each of which appear to me to fit well with a narrative approach⁴³. Scholars disagree as to whether or not interpretation plays any role in the development of grounded theory with some considering that theory emerges from data without any need for interpretation and others of the view that theory is derived from both data *and* interpretation. It is difficult for me to see how theory ‘emerges’ from grounded theory data fully formed without any form of interpretation at all and so I side on this with those who take the latter view (e.g., Strauss and Corbin, 1990)⁴⁴.

⁴³ Although the precise meaning of the statement by Floersch et al. that line-by-line coding strategies are ‘not typically *discuss(ed)*’ in narrative research (Floersch et al., 2010, p. 411, my italics) is unclear, such coding strategies would seem compatible with narrative analysis in my view.

⁴⁴ This may appear somewhat ‘convenient’ given my professed aim of using narrative techniques that, of necessity, involve interpretation, but I believe that it is simply a further indication that grounded theory and narrative approaches are inherently compatible as set out clearly by Floersch et al. (2010).

Charmaz identifies various attributes of grounded theory including a potential for investigating social justice matters, a tendency to encourage researchers to get 'up close and personal' with those being researched, and a particular effectiveness in penetrating processes to achieve an understanding of them (Charmaz, in (Eds.) Denzin and Lincoln, 2005). Charmaz clearly considers there to be an affinity between grounded theory and social justice enquiry as she states that 'The critical stance in social justice in combination with the analytic focus of grounded theory broadens and sharpens the scope of [social justice related, NC] enquiry' (ibid., p. 508). An affinity between grounded theory methodology (GTM) and ethnomethodology has also been noted, Lester and Hannen having written that '(The) focus on formal process theory provide's GTM's compatibility with ethnomethodological ideals' (Lester and Hannen, 1980, p. 11). Whilst Lester and Hannen's prime concern was with extending the then scope of research subject matter for ethnomethodologists, my particular interest is in their having written that 'the use of GTM specifically facilitates theoretical development of generic processes that have been formulated and refined from analysis of comparative empirical materials' (ibid., p. 11) such as, I suggest, the empirical talk-in-interaction and writing materials that will be the subject of Chapters IV and V. Floersch et al. identify compatibility between grounded theory and the narrative approach (Floersch et al., 2010). As regards linking grounded theory and the narrative analysis I propose as the vehicle for my investigation of autistic writing, I believe the case study of adolescent psychotropic treatment by Floersch et al. (although in a rather different field to autism) – and in which the researchers sought to integrate thematic, grounded theory and narrative analysis – implies that a marriage of narrative analysis and grounded theory has much potential in my research area too (Floersch et al., 2010). I am confident of the ability of narrative techniques to 'work' well in my area given the successful use of these techniques in previous studies (e.g.,

Hollway and Jefferson, 2000; Madriaga et al., 2008; Molloy and Vasil, 2004). Molloy and Vasil write that:

Recently in disability studies, researchers have looked to new alternative methods of research that challenge the more traditional approach of the objective researcher (usually non-disabled) attempting to extract 'data' from the (disabled) research subject. One of these alternative methods is narrative research, which involves the study of texts to provide insight into personal and social experience
(Molloy and Vasil, 2004, p. 157)

The Floersch et al. study of adolescent attitudes to the prescription of psychotropic medication (e.g., Ritalin) demonstrates, very clearly, how thematic analysis, grounded theory, and narrative analysis techniques work well together, producing a much richer outcome than if any one of these techniques is used in isolation. With this study a *thematic analysis* was undertaken of responses to interview questions to identify themes, *grounded theory* techniques were then used to reduce the themes into a smaller number of categories, following which each person's medication experience was subjected to *narrative analysis* (temporality and plot) (Floersch et al., 2010).

With Lester and Hanneen having demonstrated the theoretical compatibility between grounded theory and ethnomethodology; Fahey, Vasconcelos and Ellis having actually undertaken research in the ethnomethodological tradition using grounded theory concepts (Fahey, Vasconcelos and Ellis, 2007); Kathy Charmaz making the link between grounded theory, social justice enquiry, and narrative research; and Floersch et al. having also linked narrative analysis and grounded theory, I feel drawn towards using grounded theory and narrative research alongside the CA that is intimately linked with my ethnomethodological

stance.⁴⁵ Given these findings, the apparently disparate methods I intend using should, I believe, meld well together as a robust basis for my research. I would just add as an important postscript to the use of grounded theory in my research that it is my aim to adopt a grounded theory *approach* rather than Grounded Theory per se, this being because of my earlier point about having pre-conceived notions as to what I might find when undertaking my research; my research in general and the specific research questions in particular have been informed by an extensive literature review and cannot be regarded as fully data-driven. As Dey wrote 'One problem with this [grounded theory, NC] approach is that it requires research always to begin from scratch, instead of using whatever theoretical and conceptual resources that social enquiry already has to hand' (Dey, 2004, p. 90).

Ethnomethodology and autism

Harold Garfinkel tells us that the programme of ethnomethodological research is:

directed to the tasks of learning how members' actual, ordinary activities consist of methods to make practical actions, practical circumstances, common sense knowledge of social structures, and practical sociological reasoning analyzeable; and of discovering the formal properties of commonplace, practical commonsense actions, 'from within' actual settings, as ongoing accomplishments of those settings.
(Garfinkel, 1967, p. viii)

As Garfinkel writes, 'The study of common sense knowledge and common sense activities consists of treating as problematic phenomena the actual methods whereby members of a society, doing sociology, lay or professional, make the social structures of everyday activities observable' (ibid., p. 75). I agree with Garfinkel that members' practical actions – including speech acts (and acts of writing) – can best be analysed from an ethnomethodological

⁴⁵ Given the view that, when developing grounded theory, concepts must justify their worth (Glaser, 1978 in Charmaz, 2004) I must justify any concepts arising from my ethnomethodological perspective.

perspective whereby common sense knowledge of social matters are treated not as a *resource* for the sociologist but as the actual *subject* of sociological research (ibid.).

It may seem perfectly obvious, but, it is sometimes forgotten that ‘Talk is a central activity in social life’ (Hutchby and Wooffitt, 2008, p. 1) so that what is needed in research terms is a means of problematising the *language methods* whereby members of a society organise their naturally occurring talk-in-interaction (ibid.). Garfinkel ‘(uses) the term ‘ethnomethodology’ to refer to the investigation of the rational properties of *indexical*⁴⁶ expressions and other practical actions as contingent ongoing accomplishments of organized artful practices of everyday life’ (Garfinkel, 1967, p. 11, my italics).

In the following chapter I expand on the relevance that both Wittgenstein’s thinking and ethnomethodology have for autism and for this study of autistic language methods. In brief, my view is that, in undertaking a review of language methods in autism, I am in effect investigating “ordinary and mundane experiences” of persons with autism. I shall be treating autistic language not just as a *resource* for my study but as the *subject* of the study too (of course, by definition, being the subject of the study it has also to be a resource; the prime focus is on language as subject). I shall be treating autistic language methods in talk and writing as problematic phenomena in order to try and better understand how autistic people organise their naturally occurring talk-in-interaction and in what way(s) the organisation of autistic talk and writing differs from the organisation of PNT talk and writing. The issues of context and indexicality – that appear to be difficulties in autism – will be considered.

⁴⁶ An indexical expression is one that is context sensitive and ambiguous i.e., an expression the meaning of which can only be determined by considering its context (usage).

Having covered my philosophical and methodological positioning in this chapter, and provided a brief introduction to my views on the importance of an ethnomethodological stance when researching autism, I shall now investigate a linguistic basis for developing an understanding of autism in the following chapter before delving into the links between autism and ethnomethodology in more depth, and considering the relevance of CA to autistic language methods research.

CHAPTER III

A LINGUISTIC BASIS FOR AN UNDERSTANDING OF AUTISM

After considering my philosophical and methodological positioning, I am now ready to discuss various concepts of potential relevance to a linguistic understanding of autism. In this regard I have in mind Habermas' theory of communicative action, Searle's concept of the 'background', Wittgenstein's 'language-games', and double and triple contingency. Once these conceptual issues have been reviewed it will be possible to consider methods for researching autistic language which, as is implied by the comment at the end of the previous chapter on the importance of CA to my research, is for Chapter IV.

In the introduction to Ryan and Räisänen's sociological exploration of various aspects of the the AS experience they write that 'ethnomethodology offers an alternative way of understanding how people manage the complexity, uncertainty and density of social life by focusing on the "methods" people use to negotiate social life' (Ryan and Räisänen, 2009, p. 135); this being a deliberate attempt to view AS from a perspective other than 'psychology, neurology and psychiatry' (ibid., p. 135). This ethnomethodological perspective seems to me to be consistent with Wittgenstein's thinking. The later Wittgenstein insisted that language gains its meaning through its use in particular contexts (rather than words being mirrors of the world with specific meanings relating to things in the world⁴⁷), with an emphasis on the indexicality of language, and the linked concept of the language-game (with the use to which

⁴⁷ This is a reference to the earlier Wittgenstein's picture theory of meaning whereby the logical structure of language was said to mirror the logical structure of the world (Wittgenstein, 1922).

words are put being dependant on the particular 'game' or activity a person is engaged in). This has echoes of ethnomethodology's practical sociological methods, hence there appeared to be a natural affinity between Garfinkel and Wittgenstein. I wondered if my study could involve the synthesis of a Wittgensteinian grammatical investigation and an ethnomethodological enquiry. To respond to this question I shall consider both concepts later in this chapter, together with their relevance for a study of autistic language methods, after first reviewing the concept of the language-game which underlies both the grammatical investigation and, I argue, ethnomethodological enquiry. (Wittgenstein's private language concept is reviewed in the context of autism in a later chapter.)

Wittgensteinian language-games

At no point in the *Philosophical Investigations* (PI) does Wittgenstein define 'language-game'; rather he points out that there is no one thing in common between all the various language-games. This is why Wittgenstein uses examples to explain what he means by a language-game (a process also adopted by Canfield (1993) in his exploration of the development of language-games). From the PI we read of the following, one might say, elemental or constituent language-games: 'those games by means of which children learn their native language'; the famous example of the reporting of slabs, blocks, and building-stones (ibid., § 21); 'Giving orders, and obeying them, describing the appearance of an object, or giving its measurements, constructing an object from a description (a drawing), reporting an event, speculating about an event' (ibid., § 23); and 'inventing a name for something' (ibid., § 27). But, it is key to note that in relation to these and all the many, many other individual language-games that are played, Wittgenstein considers that his concept of the language-game encompasses the actions associated with the playing of the language-game as well as the language used (i.e., for Wittgenstein the language-game consists of both

linguistic and non-linguistic elements), writing that 'I shall also call the whole, consisting of language and the actions into which it is woven, the "language-game"' (ibid., § 7). The examples of language-games quoted by Wittgenstein are highly diverse and he has only touched the surface of this diversity. He considers that there is no one common factor linking all these many and varied language-games; they only have in common the fact that they are related to each other in a multitude of ways described as 'family resemblances' (ibid., § 67):

Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common which makes us use the same word for all,—but that they are *related* to one another in many different ways. And it is because of this relationship, or these relationships, that we call them all "language". (ibid., § 65)

"I can think of no better expression to characterize these similarities than "family resemblances"
(ibid., § 67)

Canfield considers the following language-games to be the first that the young child develops: 'greeting, requesting, naming, making believe, refusing, intention, possessing, and counting' (Canfield, 1993, p. 182). Although he expressed the view that it is impossible to *analyse* languages game like these – which he considers to be like the term 'function' as used in biology – in a noncircular way; he has attempted to *define* language-game. It is debatable whether Wittgenstein would have approved but, as Canfield's definition has helped me to gain an understanding of the language-game concept, here it is: 'a patterned form of human interaction – a custom – in which words or other symbol-tokens play a role' (ibid., p. 165). This definition reflects Wittgenstein's point that language gains its meaning from the use to which it is put. Canfield considers that 'For Wittgenstein, to use or employ a word (to utter it in the stream of daily life, and to be understood) is to participate in one or another of various language-games, and these are themselves customs' (ibid., p. 173). He says that it is clear

they are customs because we could use the very same examples to show what we mean by both a language-game *and* a custom. For example, it is customary for people to greet each other on meeting; this action and the language embedded in it constitute a language-game.

But are we still sure we understand what Wittgenstein meant by 'language-game'? We might compare Canfield's attempted definition of a language-game ("a patterned form of human interaction – a custom – in which words or other symbol-tokens play a role") with the views of other scholars on what the philosopher's term means. For instance, Malcolm considers that '(Wittgenstein's) term 'language-game' is meant to emphasize that a use of language reflects a form of life' (Malcolm, 1989, p. 23), giving the example of the exchange of greetings as a form of life which can also be regarded as a practice or, as Canfield would have it, a custom (ibid.). This might suggest that for Canfield a form of life is "a patterned form of human interaction", for instance, exchanging greetings is a typical form of human interaction in all societies and one that follows a pattern; one only has to observe what can happen when there is an exception to the pattern when, say, the response to the greeting "how are you?" is followed by a long list of the aches and pains the person has been suffering rather than the standard pattern of something like "fine, how are you?". These are what one might call rhetorical questions that constitute a form of life – exchanging greetings when meeting someone – in which language has a role to play. It seems that persons with autism are much more likely than their PNT peers to fail to be enculturated into forms of life and thereby, on occasions, and much more often in some cases, to use the language embedded in the cultural practice or custom incorrectly; in other words, to fail to play the language-game fully correctly or to play it at all. Typically developing people participate in the use of language as they would participate in a game being played which is why Malcolm considers that Wittgenstein made the comparison between language and games (I would be more inclined to

consider that Wittgenstein may have compared language *and the activity into which it is embedded* with games which involve the use of language between the participants). Malcolm also writes that ‘To speak a language is to participate in a way of living in which many people are engaged’ (ibid., p. 22) which ostensibly seems an entirely appropriate thing to say, and clearly any person who has learned some element of a language must have learned something about the activity of which it is a part, but for autistic individuals the learning of the language and the activity, indeed the form of life to use Wittgenstein’s expression, will not always be learnt to a typically developing level. Malcolm points out that ‘The language I speak gets its meaning from the common ways of acting and responding of many people’ (ibid., p. 22) so when a person, such as an autistic person, whose difficulty with social interaction and social communication may prevent them from learning the “common ways of acting and responding”, or at least make it less likely that they will learn these ways as well as the PNT, this, in my opinion, can be described as trouble with language-games. I am therefore believe that a focus in autism on Wittgenstein’s language-games will better enable those working with autistic people to develop an understanding of the *essence* of autism.

Hughes has drawn attention to the compatibility between Wittgenstein’s philosophy and ethnomethodology writing that no other approach comes closer to being a Wittgensteinian sociology than ethnomethodology and that this point has been acknowledged by various other commentators and ethnomethodologists (Hughes, 1977). Garfinkel considered that one of the ways in which someone could be regarded as a ‘judgmental dope’ is by failing to realise that talk is always part of a language-game, writing that ‘following Wittgenstein, person’s actual [linguistic, NC] usages are rational usages in *some* “language game.” What is *their* game? As long as this programmatic question is neglected, it is inevitable that person’s usages will

fall short' (Garfinkel, 1967, p. 70, author's italics). Writing about Garfinkel's radical approach to the analysis of language, Heritage draws a comparison with Wittgenstein:

Garfinkel has developed a radical analysis of natural language use (and) has consistently rejected prevailing views of language which are dominated by conceptions of its representative function. This is partly because, like Wittgenstein, he has sought to focus attention on the variety and variability of the ways in which language makes contact with the world.
(Heritage, 1984, p. 309/310)

Heritage also compares Garfinkel's descriptive ethnomethodology with Wittgenstein's emphasis on finding solutions to philosophical problems through description rather than explanation (Heritage, 1984). I could quote many other linkages between ethnomethodology and Wittgensteinian thought but shall confine myself to just the one more key quotation:

[Wittgenstein] emphasized the public, conventional nature of language use. *In one form or another, such a perspective is followed in a wide range of discourse analytic work, including discursive psychology, rhetoric, ethnomethodology, and much of conversation analysis.*
(Potter, 2001, p. 3, my italics)

Habermas on language-games

In a more critical vein, Habermas has written of Wittgenstein's language-game concept that 'it is precisely the conventional character of the game that shows the limits of attempting to understand language on the model of a game ... A language is just not simply a game; we have to take it seriously' (Habermas, 2001, p. 57). Is Habermas actually suggesting that Wittgenstein does not take language seriously? (Wittgenstein concludes the Philosophical Investigations by pointing out that 'An investigation is possible in connexion with mathematics which is entirely analogous to (his) investigation of psychology. It is just as little a *mathematical* investigation as the other is a psychological one.' (Wittgenstein, 1958, p. XIV) – In other words, both are grammatical investigations. Has any other philosopher

ever placed language more firmly at the heart of his work? Habermas also states that ‘We do not choose the rules of language in the same arbitrary way in which we do the rules of a game. Precisely in this regard a strategic game like chess is not an appropriate model for language’ (Habermas, 2001, p. 57). Ignoring the unusual reference to a “strategic” game (which could imply that some other, i.e., non-strategic, game might be an appropriate model for language, which I am sure Habermas did not intend), is he suggesting that Wittgenstein likened language to chess? (There are many other examples of language-games in the *Philosophical Investigations*. Why choose chess?) The account of games of strategy that immediately follows is thus rendered irrelevant. Further on we hear ‘Speakers and language are integrated in a different and more intimate way than are players and their games. Wittgenstein does not take account of this systematically’ (ibid., p. 58). Of course, the integration between speakers and language is different and more intimate to that between players and their games (although what differences other than the degree of intimacy does he have in mind?). Habermas is taking Wittgenstein too literally. The game analogy is primarily to capture (a) the complex rule-based nature of language, and (b) that the development of competence occurs without, necessarily, having any knowledge of the rules being followed. In this it achieves its object brilliantly; we should not try to push the analogy too far as I believe Habermas does.

Following up his view that the game model of language has its limits, Habermas discusses two particular circumstances: the intersubjective relation between speakers and the relation of speech to something in the world. With regard to the former he writes that ‘Wittgenstein reduces sameness of meaning to the intersubjective recognition of rules. But he does not examine the reciprocal relation between the two subjects who accept a rule, for whom a rule, such as a semantic convention, is valid. The fact that each partner must be able to anticipate

the other's expectation is by no means trivial' (ibid., p. 59). This was not Wittgenstein's project. Habermas has not added anything of significance to the *language-game* project. As for this project, we read that 'Wittgenstein was led astray by ... (his becoming) aware of the pragmatic dimension of speech acts, whereby we produce a manifold of contexts for the possibility of reaching understanding ... (succumbing) to the complementary error of ignoring henceforth the privileged role of cognitive language use' (ibid., p. 62). We are told that 'Wittgenstein does not recognize that only the cognitive use of language opens up the dimension to which *all* speech acts must refer' (ibid., p. 62, author's italics) and that, he both ignored the privileged role of cognitive language use, and did not appreciate that language-games only covered communicative language use (this is presumably what the cryptic comment on "(opening) up the dimension" means). What Habermas fails to appreciate is that language-games and communicative language use are primary and cognitive language use is secondary and derivative; there can be no private language – he has accepted this – hence cognitive language use can only involve communicative (public) language developed in language-games. Therefore, in my opinion, Wittgenstein was correct in supposing that 'the plurality of language games that he discovered encompassed all conceivable ways of using words and sentences' (ibid., p. 64).

As regards the rules of language-games, Habermas writes that: 'If we take generative grammar as a model for developing a universal pragmatics, why should we not be able to discover and reconstruct the rule systems according to which we generate contexts of interactions, that is, the symbolic reality of society?'⁴⁸ (ibid., p. 65). I think Wittgenstein would say that it is neither necessary nor possible to reconstruct the highly complex rule systems for language-games. His disappearing chair example makes this point as follows:

⁴⁸ It surprises me that anyone could conceive of the possibility of determining the rules behind the pragmatic usage of language in language-games. Why should we not be able to? Because the usages are unlimited and one could never complete the task. But why would one want to even attempt something so pointless?!

I say "There is a chair". What if I go up to it, meaning to fetch it, and it suddenly disappears from sight?—"So it wasn't a chair, but some kind of illusion".—But in a few moments we see it again and are able to touch it and so on.—"So the chair was there after all and its disappearance was some kind of illusion".—But suppose that after a time it disappears again—or seems to disappear. What are we (sic) to say now? Have you rules ready for such cases—rules saying whether one may use the word "chair" to include this kind of thing? But do we miss them when we use the word "chair"; and are we to say that we do not really attach any meaning to this word, because we are not equipped with rules for every possible application of it?
(Wittgenstein, 1958, § 80)

In my opinion, if it were possible to determine a set of rules for each language-game it might just be possible for high-functioning autistic people – many of whom it would appear have a particular ability to understand systems – to figure out the rules given sufficient time; it is the very fact that the complexity of language-games makes determination of rules for every conceivable situation impossible that suggests to me that all but the simplest language-games present a potentially serious difficulty for autistic people. Whilst PNT individuals have the ability to learn how to 'play' even the most complex language-games in the cut and thrust of talk-in-interaction that allows little thinking time, the ability of autistics to do so is limited. In chapter X I shall return to Wittgenstein and the relevance of language-games in autism.

Double contingency and triple contingency

Craig describes single contingency and double contingency as follows: 'single contingency can be represented by a linear (A/B) model in which A contingently selects a message to influence B. Double contingency can be represented by an interactionist (A↔B) model in which the incommensurable perspectives of A and B jointly determine the message' (Craig, 2007, p. 132). Triple contingency takes into account the context in which the interaction between the two people (A and B; ego and alter) takes place, the context being the third

contingent element in the interaction. Craig writes that ‘Triple contingency introduces a third contingent perspective that forms the context in which A and B must interact (ibid., p. 132).

Although I happen not to agree with the intellectualist aspects of Craig’s position on the matter of contingency (and have quoted him simply for his clear description of the various types of contingency), a general reading of Habermas, Strydom and others has suggested to me that the concepts of double and triple contingency may have a connection with autism that I shall now consider. Strydom considers that, in relation to double contingency, Habermas ‘largely emphasizes the moral dimension and downplays or even rejects the sociocognitive one’ (Strydom, 2001, p. 177) and ‘in the final analysis does not recognize the problem of triple contingency’ (ibid., p. 177). Be that as it may, my interest is not in the attitude Habermas takes to the matter of contingency but in a potential link to autism. In the case of each type of contingency the context is social interaction between (taking the simplest case) two people. Single contingency is the influencing of one person in interaction by another which can also be expressed as the influencing of alter by ego. When taking an interactionist perspective one appreciates that when two people interact there is a bi-directional contingency – where each person in the interaction influences the other person or, using the alternative wording, where alter influences ego and the alter ego influences ego – which is known as double contingency. In view of the atypical ontogenesis and socialisation associated with autism it seems highly relevant that Strydom stresses the role that ontogenesis and socialisation play in enabling a person to develop an understanding of the third contingent perspective in triple contingency, namely the context in which interaction between people takes place):

Sociocognitively, the individual learns *in the course of ontogenesis and socialization* to objectify the reciprocal interrelation of participant perspectives from the perspective of the observer and thus to adopt an objectifying attitude toward his or her own interaction with alter ego.

(Strydom, 2001, p. 175, my italics)

If one interprets Strydom's capacity to "adopt an objectifying attitude" as simply referring to the development in an individual through socialisation of a 'mind reading' capacity rather than a requirement for some kind of 'theory of mind' (which I could not accept) I hypothesise that the atypical ontogenesis and socialisation of an autistic ego (A) may affect:

1. A's understanding that they are influencing an alter ego (B) in interaction leading to a tendency to be unaware they are sending messages to B which will influence B's response and hence to a tendency not to understand the message they receive from B to the extent that it amounts to a response from B to A's message; this appears to be an effect of double contingency where one of two interactants is autistic.
2. A's ability to adopt an objectifying attitude toward their interaction with B; this appears to be an effect of triple contingency where one of two interactants is autistic.

Given the difficulty autistic people often have generalising lessons learned from a particular situation it is also notable that Strydom writes of the generalisation of the system of perspectives involved in relation to triple contingency as follows:

Once the individual is able to [adopt an objectifying attitude toward their interaction with alter, NC], he or she distinguishes ego's and alter's system of interchangeable, interrelated participant perspectives from the particular situation in which they find themselves *and appreciates that the system of perspectives is a general one* that anyone would have to adopt were he or she to take the places of ego and alter.
(ibid., p. 175, my italics)

Whilst Habermas emphasised the moral aspect of triple contingency I suggest that it is the sociocognitive aspect of triple contingency that may have the potential to contribute towards an understanding of autism by enabling an 'interactive' view of autism as involving, not just

a difficulty in understanding the mind of the other person in an interaction but also in: (a) having difficulty understanding what is happening in the ‘to and fro’ of the interaction with that other person (the double contingency effect), and (b) having difficulty in adopting an objective stance on the interrelation of perspectives in the interaction and thus in being able to generalise patterns of interaction into norms or ‘rules’ (the triple contingency effect).

The habitus and the Background

In a later chapter at the overview stage of my thesis I shall discuss Solomon’s and Sterponi’s references to Pierre Bourdieu’s concept of *habitus* in relation to autism, specifically because it has been proposed that the habitus is a possible factor contributing to difficulties in autism. (In this later chapter I shall also refer to Medina’s suggestion of a link between Wittgenstein’s *bedrock* beliefs and judgments concept and habitus.) (Bourdieu, 1990; Medina, 2003; Solomon, 2008; Sterponi, 2004). At this stage I just want to explain why a concept such as the habitus – or John Searle’s apparently similar concept of the *Background* has theoretical relevance to the research reported on in this thesis. It is noteworthy that Searle has, himself, noted a similarity between the Background and the habitus, writing that ‘Bourdieu’s notion of habitus ... is closely related to my notion of the Background’ (Searle, 1992, p. 177) and, three years later, that ‘if I understand him correctly, Pierre Bourdieu’s important work on the ‘habitus’ is about the *same sort of phenomena* that I call the Background’ (Searle, 1995, p. 132, my italics).⁴⁹ Marcoulatos (amongst others) argues that there are significant differences between the habitus and the Background, but that ‘the Background may be regarded as closely related to the habitus precisely to the extent that it exists as Searle assumes it not to, i.e., intentionally’ (Marcoulatos, 2003, p. 83).

⁴⁹ It is interesting that, when noting an apparent similarity between the Background and the habitus, Searle also suggests that ‘much of Wittgenstein’s later work is about ... the Background’ (Searle, 1995, p. 132).

My interest in these concepts arises from a view that both concern an individual person's dispositions – dispositions that develop dynamically throughout life but to a substantial extent during the formative years as a young child and adolescent - and that, in a general sense, typically developing (PNT) dispositions are significantly different from autistic dispositions because of the effect of autism on the developmental process. In a sense *for the purposes of this thesis* it may not matter a great deal that there are technical differences between the Background and the habitus (arising from the intellectual perspective of the two theorists), however, as this is a key aspect of my thinking a brief discussion and comparison of the concepts is justified. Incidentally, one potential technical difference between these two concepts concerns the question of whether they both have a dynamic or developmental aspect (important given that autism is classified as a pervasive developmental condition). It has been suggested to me that Searle omits the dynamic aspects of the habitus from the Background. I do not agree. He states quite clearly that 'one can *evolve*, a set of abilities' (Searle, 1995, p. 142, my italics) and that 'we *evolve* a set of dispositions' (ibid., p. 145, my italics). The Background *is* without doubt dynamic. (The quotations from Bourdieu and Marcoulatos on the following pages clearly show that the habitus is dynamic; also, it is of interest to note that in his article on what he regards as the cognitive origins of the habitus, Lizardo states that Bourdieu's social theory involves a *developmental* temporality manifested as dispositions – the habitus – in addition to the field concept which is a historical temporality manifested as durable but transposable objective social institutions (Lizardo, 2004).

What is the habitus? Bourdieu writes of a dialectic between 'social structures and structured, structuring dispositions through which schemes of thought are formed and transformed' (Bourdieu, 1980, p. 41) whereby social structures influence an individual's dispositions which turn back and influence the structures themselves. This 'system of structured,

structuring dispositions, the *habitus*, ... is constituted in practice and is always oriented towards practical functions' (ibid., p. 52, author's italics). He expands on this by pointing out that the habitus is both durable *and* adaptable (dynamic) and that it involves neither a purposive intent on the part of the individual nor a knowing application of 'rules', rather it operates below the level of consciousness. Bourdieu describes this as follows:

The conditionings associated with a particular class of conditions of existence produce *habitus*, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures⁵⁰, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them. Objectively 'regulated' and 'regular' without being in any way the product of obedience to rules, they can be collectively orchestrated without being the product of the organizing action of a conductor. (ibid., p. 53, author's italics)⁵¹

The following description of the habitus by Marcoulatos is one that makes sense to me:

Directly stated, the habitus is embodied social objectivities, i.e., structures of social significance transubstantiated into aspects of the living actuality of one's body, and, through their embodiment, practiced and reinforced. It is arguably the most decisive manner of actualization of social regularity: social regularity *is* primarily habitus, i.e. *acquired forms of life* (Marcoulatos, 2003, pp. 72/73, author's italics)

In the following important passage, Bourdieu draws attention to the tendency for the habitus to be produced and reproduced in a consistent (coherent) manner because social groups, the

⁵⁰ Lizardo argues that the structured and structuring aspects of Bourdieu's dialectical habitus concept is based on Piaget's 'conceptualization of the process of knowledge acquisition as a dialectic produced both by structured action upon reality that transforms the world, and by the outer environment's subsequent structuring effect on the categorical schemata that we use to make sense of the world' (Lizardo, 2004, p. 385).

⁵¹ It is of particular interest to me to note that Bourdieu clearly tries to avoid introducing new concepts because of the risk of 'being both schematic and formal' (Bourdieu, 1980, p. 290). He justifies a new concept in the case of the habitus by 'the false problems and false solutions that it eliminates, the questions it enables one to formulate better or to resolve, and the specifically scientific difficulties to which it gives rise' (ibid., p. 290). (I presume the comment about giving rise to "scientific difficulties" is his way of saying that the habitus may enable a researcher to problematise something.) I regard the avoidance of unnecessary formality a refreshing attitude for a theoretician to take and one that everyone engaged in theory development should note.

sexes, generations, and social classes are structured in a particular manner.

The coherence that is observed in all the products of the application of the same *habitus* has no other basis than the coherence that the generative principles constituting that *habitus* derive from the social structures (the structure of relations between the groups, the sexes or the generations, or between the social classes) of which they are the product and which they tend to reproduce
(*ibid.*, p. 95, author's italics)

With regard to the generation of a specific habitus in relation to different social groups, the sexes, generations, and social classes, Fleming writes that “There are different habituses associated with each of these groups. Each individual’s habitus is a complex mix of these different habituses together with certain individual peculiarities.” (Fleming, undated) The question arises as to what might happen when a person does not quite ‘fit in’ to the social group they are expected to be a member of or has some difficulty in their relations with other persons (not just the opposite sex, but that might be an issue⁵²)? It appears intuitively correct that for such a person their habitus (made up of a mix of different habituses arising from their membership of certain social groups, their sex, their generation, and their social class) *would not have developed as it would for a typically developing person*. From an SI perspective, one could rephrase this differential development as involving certain aspects of the generalised other not being subsumed by the ‘I’ to become, through sociality, a new ‘Me’.

Self-awareness of enculturation into a social group can only take place when *a person has an awareness of their membership of the group*. If a person does not know they are autistic then

⁵² During the writing of this section I read Ljiljana Vuletic’s PhD thesis on the personal development of autistic individuals which includes detailed notes about the life history of the eight adults interviewed (seven men and one woman aged between 25 and 63; six aged 36 or older). These are all high-functioning individuals most with college diplomas, two with university degrees, and one with a doctorate. Four of the participants in Vuletic’s research had never had a romantic relationship, one had had one such relationship (said to be mostly long-distance), and only one was married at the time of the interviews (another was divorced) i.e., despite the age range, half of the participants had never had a romantic relationship and only a quarter had married.

clearly there can be no question of them being enculturated into the community of persons with autism; they are only a *potential member* of that particular community. More importantly, if a person is unaware of being autistic the nature of their enculturation into the social groups *they have membership of* will differ from the nature of their enculturation into the same groups if they knew they have autism. Hence, it is not just that *being autistic* affects the nature of an individual's enculturation, and therefore the development of their habitus, but that *being aware of being autistic* also affects enculturation and habitus (in SI terms, an awareness of being autistic involves the appropriation of an autistic 'other' through role taking and its internalisation as a new 'Me'). But there is yet a further factor to take into account: the issue of disclosure of one's autism. The nature of enculturation and hence of habitus is affected by whether or not a person who knows about their autism decides to disclose it. So whether or not the other members of each social group the individual with autism is a member of are aware of a person's autism (and some groups may not be aware whilst others are) is also relevant to the habitus of an autistic person (this, of course, applies to all the other so-called 'hidden disabilities' as well). So, the habitus of a person with autism – apart from being affected by everything that can affect habitus in anyone is also affected by their being autistic, their being aware of being autistic, and *significant others being aware of their autism*. Why might this be important? To the best of my knowledge, the only research into autism undertaken from a Bourdieuan perspective – considering life worlds and practical logic as well as habitus – has focused on the *habitus of significant others* in the life worlds of autistics, not on the habitus of the autistics themselves. This research suggests that certain dispositions governing the nature of child-directed communication may work against the benefit of autistic children (Ochs et al., 2005; Solomon, 2008). Solomon, writing about the Ochs et al. study just referred to, writes that the habitus of significant others in the lives of autistic children 'may compound, rather than minimize, the communicative difficulties

associated with severely autistic children's impairments' (Solomon, 2008, p. 16).⁵³ This is very worrying and, in my view, warrants urgent attention by researchers, but it does not concern the habitus of autistics themselves, and I can find absolutely no research at all into this latter aspect of habitus which must surely be the most important aspect of habitus in autism.⁵⁴ Research into family resemblances within the habitus of people with autism in the three categories referred to (individual unaware of being autistic; autism known about and disclosed; autism known about but not disclosed) could prove to be of much benefit to the autistic community; such research would also be fully consistent with Solomon's point about researching autism 'as an experience and a way of being in a social world and less as a disorder in need of intervention' (ibid., p. 150).

As with Habermas, Searle is interested in social interactional rules, writing that there are sets of rules (he calls them 'constitutive rules') which govern the way in which social institutions work *but that people are not usually aware of and, indeed, may even misunderstand*. He has written that 'the very people who created the institution may be unaware of its structure (of rules)' (Searle, 1996, p. 127). Searle asks how it is possible that rules can be said to govern the way something works if people are generally unaware of the rules and so cannot consciously apply them in practice (Searle, 1995). Whilst pointing out that the standard response to this question is simply to state that the person concerned applies the rule unconsciously or that the rules may not be things that persons could be conscious of (Searle, 1995) he considers that 'in most appeals to the unconscious in Cognitive Science we really

⁵³ Solomon is referencing a study by Ochs et al. (2005) which suggested that aspects of European and American child-directed communication habitus such as 'face-to-face body orientation, speech as the primary semiotic medium for the child, and caregivers' slowed speech tempo and profuse praise' (Solomon, 2008, p. 162) may be counter-productive, that 'side-by-side body orientation, pointing to symbols as the primary semiotic medium for the child, and caregivers' rapid prompts and restrained praise' (ibid., p. 163) may achieve better effects, but that it was difficult for caregivers to change culturally determined practices (ibid.).

⁵⁴ I refer to habitus in autism rather than to autistic habitus as there is no such thing as the latter, any more than there is a PNT habitus; all people are different with their own individual habitus whether autistic or PNT. Of course, there are probably family resemblances between some aspects of the habitus of PNT people that do not appear in the habitus of autistics; this is likely to be a reason for autistics not 'fitting in' to PNT culture.

have no clear idea what we are talking about' (Searle, 1995, p. 128)⁵⁵ and finds his answer in the thesis of the Background. In Searle's Background 'intentional states function only given a set of Background capacities that do not themselves consist in intentional phenomena' (ibid., p. 129) otherwise described as 'the set of nonintentional or preintentional capacities that enable intentional states of function' (ibid., p. 129). According to Marcoulatos a crucial distinction can be drawn between the Background and the habitus in that, whereas 'The Background is a neurophysiological mechanism that *enables* occurrent intentionality' (Marcoulatos, 2003, p. 70, my italics), the habitus is apparently an occurrent, intentional phenomenon that 'constitutes an existential perspective' (ibid., p. 72). However, Bourdieu was himself clear about the influence of Piaget on his construct of the habitus which may actually not be so different from the Background as Marcoulatos may think. Searle appears to have insisted that the Background is a combination of nonintentional and preintentional capacities which makes it a neurophysiological phenomenon that only enables the development of dispositions. As I have already stated, although I do not dismiss the need for neurological research, my interest is in the lived experience of autism; hence, the autistic dispositions themselves are important to me, not their neurophysiological cause(s). A person's dispositions involve a neurophysiological (preintentional) aspect and an intentional aspect; what is most important in the context of my thesis is not a consideration of what it is about dispositions that is preintentional and what it is that is intentional but the fact that each

⁵⁵ A colleague has pointed out to me that there may be an intermediate situation between 'consciousness' and being 'unconscious' whereby rules are followed *subconsciously*. Schmidt writes that there is 'no generally agreed upon sense of what is meant by labels such as "conscious" and "unconscious" or "subconscious"' (Schmidt, p. 12). Searle himself says that 'Typical textbooks of brain science to this day have no chapters on consciousness and say very little to suggest that it poses an important scientific problem' (Searle, 1997, p. 193). He points to a tendency amongst philosophers to 'deny the existence of consciousness in the sense of inner qualitative subjective states of awareness or sentience' (ibid., p. 194) which he puts down to an aversion to dualism coupled with a view that accepting the existence of an unconscious mind implies acceptance of 'some sort of dualistic ontology' (ibid., p. 194). He concludes his thoughts on the mystery of consciousness by writing that 'The mystery is not a metaphysical obstacle to ever understanding how the brain works; rather the sense of mystery derives from the fact that at present we not only do not know how it works, but we do not even have a clear idea of how the brain *could* work to cause consciousness' (ibid., p. 201, author's italics). I think Searle would make no distinction between 'unconscious' and 'subconscious'.

person has a set of durable, dynamic dispositions which are a product of social interaction during their formative years, and that autism – which can profoundly affect the nature of social interaction – will have an impact on the dispositions of an autistic person that, *ceteris paribus*, will differ significantly from the dispositions developed by a PNT individual.

Although I favour the *habitus* over the Background in the context of my thesis, I believe that Searle makes various points of relevance to my context.⁵⁶ He writes that Background capacities consist of abilities, dispositions, and tendencies. For him, *inter alia*, the Background facilitates linguistic and perceptual interpretation, structures consciousness, develops each individual's motivational dispositions (which conditions the structure of our experiences), enables various types of readiness⁵⁷ and disposes people to various types of behavior (Searle, 1995). Background capacities enable⁵⁸ people to understand indexical (context sensitive) expressions that can be interpreted in more than one way, (Searle, 1995). His argument is that people interpret indexical words correctly because their Background “blocks” incorrect interpretations:

the only thing that blocks those (incorrect) interpretations is not the semantic content but simply the fact that you have a certain sort of knowledge about how the world works, you have a certain set of abilities for coping with the

⁵⁶ I became interested in the Background before appreciating what I now regard as the importance of the *habitus* in the context of an understanding of the lived experience of being autistic. I have already noted Marcoulatos' view that the two concepts may be seen as similar 'precisely to the extent that (the Background) exists as Searle assumes it not to, i.e., intentionally' (Marcoulatos, 2003, p. 83). Marcoulatos acknowledges that a reader might initially assume (as I did) that the Background can take an occurrently intentional form, 'only to soon realize that Searle is referring to forms of intentionality merely *enabled* by the Background' (ibid., p. 81, author's italics). I believe that Searle's exposition of the Background is sufficiently vague on the matter of intentionality to justify including his ideas within my theoretics where they are relevant in the context of the development and functioning of the abilities, dispositions, and tendencies to which both the Background *and* the *habitus* refer.

⁵⁷ By readiness Searle means that in any given situation we expect certain things and not others so we are ready for things that we associate with each situation. So, for instance, when skiing our familiarity with what happens on the ski slopes readies us for people trying to push in front of us in the ski lift line.

⁵⁸ Searle's reference to enabling is an example of his apparent belief that the Background *facilitates* intentional activity (in this case, the interpretation of indexical expressions) rather than actually being responsible for the activity. It does not matter to me whether this is a correct interpretation of Searle's position or not and/or the activity is preintentional or intentional; in the context of this thesis it is argued that dispositions forming part of the Background/*habitus* (1) enable certain activities in typically developing (PNT) people, but (2) are less well developed in autistic people thus giving rise to existential differences between the PNT and autism.

world, and those abilities are not and could not be included as part of the literal meaning of the sentence
(Searle, 1995, p. 131).

Searle extends his thesis for the Background from consideration of people's ability to understand indexical language open to more than one interpretation by making the point that any intentional state – whether or not expressed in the form of language – also very often requires interpretation on our part to make full sense of the act (speech act or anything else with intentionality) and that our Background abilities enable us to understand other people's intentions. Without a Background⁵⁹ no individual would be able to make sense of what is going on around them in their social environment; they would not, for instance, be able to identify irony or sarcasm from a statement of fact without an interpretive ability enabling them to make sense of what was said in light of the context in which it was said and their knowledge of the person who said it. But Searle takes his argument another step further in stating that the Background not only gives people the ability to interpret language (and everything they see⁶⁰) but also 'structures consciousness' (Searle, 1995, p. 133).

All non-pathological forms of consciousness are experienced under the aspect of familiarity. And this is a function of our Background capacities. Because all intentionality is aspectual, all conscious intentionality is aspectual; and the possibility of perceiving, that is, the possibility of experiencing under aspects requires a familiarity with the set of categories under which one experiences those aspects. The ability to apply those categories is a Background ability.
(Searle, 1995, p. 133, my italics).

I note the reference to 'non-pathological forms of consciousness' (Searle, 1995, p. 133) which I believe can be rephrased as PNT consciousness. Although, I would not use the term "pathological", and prefer "being" or "cognition" to "consciousness", I could agree with

⁵⁹ The absence of a Background could be rephrased in SI terms as an inability to take the role of the other.

⁶⁰ Searle also uses the example of the classic 'duck looking left / rabbit looking right' visual illusion to show how the background structures the way people see things.

Searle if he meant – as I think he does – that a different form of cognition or being to that of the PNT may result in a different set of Background abilities to those of the PNT; for instance, significantly different Background capabilities⁶¹ in the areas of language and perception in an autistic individual than with a PNT (typically developing) individual.

Searle considers that with all human institutions there is a ‘socially created normative component’ (Searle, 1995, p. 146) meaning that typically developing people know when they and others are behaving appropriately and when they are behaving inappropriately in any given set of circumstances. There will be actions that are within the bounds of an individual’s expectations and others that fall outside and their Background capacity to know when something is ‘right’ and when it is ‘wrong’ enables them to distinguish between the expected and the unexpected. In my view, the absence of typically developing Background capacities in autism – *including the capacity to understand and play along with language-games* – clearly suggests why an autistic person can appear to others like a fish out of water in social interaction, whereas, as Searle writes, the “man at home in his society [this must be the typically developing person I think, NC] is as comfortable as the fish in the sea”:

it does not follow that a person is able to function in a society only if he has actually learned and memorized the rules and is following them consciously or unconsciously. Nor does it follow that a person is able to function in society only if he has ‘internalized’ the rules as *rules*. The point is that we should not say that the man who is at home in his society, the man who is *chez lui* in the social institutions of the society, is at home because he has mastered the rules of the society, but rather that the man has developed a set of capacities and abilities that render him at home in the society; and he has developed those abilities because those are the rules of his society. The man at home in his society is as comfortable as the fish in the sea
(Searle, 1995, p. 147, author’s italics)

⁶¹ Using SI terminology, one can say that the ‘Me’ develops differently in autism in comparison to the PNT because autistic and PNT individuals will not always perceive and interpret symbols in the same way.

Before now turning to consider ethnomethodology and CA in relation to a study of autistic language methods I need to demonstrate why I do not regard a Wittgensteinian grammatical investigation as an appropriate tool for developing a linguistic understanding of autism. After reviewing the grammatical investigation concept I discuss the use of an ethnomethodological approach for research in autism and then move on to deal with the relevance of CA for linguistic analysis of autism (or, rather, analysis of language methods in autism).

Wittgensteinian grammatical investigations

A Wittgensteinian grammatical investigation involves an appreciation that concepts can only be couched in terms of language and thus cannot be expressed any more clearly than language allows; hence one must be aware of the practices involved when words are used so the *use* to which they are put is understood. As Wittgenstein said, 'The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the *limits of language*' (Wittgenstein, 1958, § 119, my italics). A grammatical investigation is thus an analysis of word usage to ensure a scholar is not unknowingly confused by the limits of language into failing to spot nonsense in plain sight!

Could grammatical investigations be the way to cut through all this apparent confusion? In his work on the philosophy of psychology Wittgenstein stressed that philosophers (and psychologists following them knowingly or not) were prone to make mistakes in trying to analyse psychological concepts through the *confusion* generated by misinterpreting language, writing: '[philosophical problems] are, of course, not empirical problems; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: *in despite of* an urge to misunderstand them' (Wittgenstein, 1958,

§ 109, author's italics). Wittgenstein's solution was to advocate a *grammatical investigation* to '(shed) light on our problem by clearing misunderstandings away' (ibid., 1958, § 90). As he intends these investigations to consider *all* aspects of language (grammar, semantics etc.), adoption of the term grammatical investigation is one of many examples of his using a term in common use in a specifically technical way. Pitcher writes that 'Wittgenstein is not using the term "grammatical" here in the restricted sense it normally has; he is using it in an extremely broad sense, to mean simply *linguistic*' (Pitcher, 1964, p. 236/237, author's italics). Jost has also written that Wittgenstein's grammatical investigation concept involves a linguistic analysis of the subject under review (Jost, 1995). Wittgenstein writes that 'we may not advance any kind of theory. There must not be anything hypothetical in our considerations. We must do away with all *explanation*, and description alone must take its place' (Wittgenstein, 1958, § 109, author's italics). For Wittgenstein, such description should take the form of a grammatical (linguistic) investigation. However, if I understand the concept of the grammatical investigation correctly, it is a philosophical technique designed to ensure that scholars are not led into the confusion that can arise when the limitations imposed by language are not appreciated; for instance, the tendency to reify psychological concepts such as the existence of the mind simply (in Wittgenstein's view) because we speak of the mind in the normal course of conversation. The grammatical investigation is apparently *not* a technique to be used in the investigation of language methods used in conversation; only the difficulties that may arise when a concept defining word is confused with 'reality'. In the light of this conclusion I needed other 'tools' for my investigation of language methods.

Ethnomethodology and autism (continued)

The famous 'Agnes' case study from Garfinkel's 'Studies in Ethnomethodology' concerns a

person born male⁶² but who said ‘she’ always felt she was female and eventually convinced her doctors to carry out a sex change operation (Garfinkel, 1967; Heritage, 1984). Garfinkel compares “normal sexuality” with Agnes’ “socially manufactured sexuality” as follows:

normal sexuality is accomplished through witnessable displays of talk and conduct, as standing processes of practical recognition, which are done in singular and particular occasions *as a matter of course*, with the use by members of ‘*seen but unnoticed*’ backgrounds of commonplace events. (Garfinkel, 1967, p. 180, my italics)

Agnes was self-consciously equipped to teach normals (sic) how normals make sexuality happen in commonplace settings as an obvious, familiar, recognizable, natural, and serious matter of fact. Her specialty consisted of treating the ‘natural facts of life’ of socially recognized, socially manufactured sexuality as a *managed production* so as to be making these *facts of life ... visible and reportable* – accountable – for all practical purposes. (ibid., p. 180, my italics)

I think Garfinkel’s view was that: (a) this managed production was much more than ‘just’ the impression management referred to by Goffman (1959), and (b) that, whilst those who are unambiguously male or female become men and women quite naturally as a natural cultural development, someone like Agnes had to work at it and hence became aware (or more aware) of the process of becoming a man or woman than would usually be the case.

My view is that there is an analogy to be drawn here with autism in the sense that fitting in can be a managed production in both cases and that an in-depth study of how people with autism work at ‘fitting in’ would be feasible and worthwhile. However, in following up what initially appeared to me simply to be a specific situation where an ethnomethodological approach to enquiry had an interesting link to autism, further reading suggested that (1) the

⁶² I like Wooffitt’s succinct description of Agnes as ‘an intersexed person who, having been raised as a male, had to learn explicitly the otherwise tacit skills required to pass as a female’ (Wooffitt, 2005, p. 201) although my reading of Garfinkel is that Agnes was male, not intersexed. To be ‘intersexed’ requires “a discrepancy between the appearance of the external genitalia and the type of internal ... genitalia” (from MedicineNet.com) whereas it seems fairly clear from Garfinkel’s account that there was no such discrepancy in Agnes’ genitalia.

basic *raison d'être* of ethnomethodology may make this approach to sociology a natural fit with research into the social interactional and communicational difficulties associated with autism, and (2) more importantly, the fundamental questions that ethnomethodology asks about social life directly relate to the social difficulties in autism. Atkinson writes as follows about the extremely complicated nature of social life – including natural language used in social communication – which requires methods for coping with ambiguity:

Now though ... social interaction is an awesomely complex and delicate matter, members of society have, as was indicated earlier, methods for coping with the indexical particulars with which they are continually faced. That is, in perceiving what they see or hear as an object in the world, they are involved in substituting an objective for an indexical expression. The warrant for this claim is that *were it not so, we would never be able to make sense of what was going on, and hence social life would not be possible.*
(Atkinson, 1978, p. 182, my italics)

That persons with autism face a difficulty in coping with ambiguity in language suggests that their methods 'for coping with the indexical particulars with which they are continually faced' (ibid., p. 182) are, by definition, substantially less effective than the methods adopted by PNT people *given the difficulties with language associated with autism.*

Atkinson goes on to draw attention to the focus of the researcher's use of language in ethnomethodology to gain an understanding of *how* people cope with ambiguity as against the more usual focus on the use of language as a resource for the researcher to understand *what* people make of that ambiguity through their repairing of indexical expressions:

the would-be researcher is typically invited to learn the natural language of the particular language community he is studying, not so much so that he can provide for *how* members of the community see things and hear things in the way that they hear them [and, presumably, in the way that they see them, NC], but rather so that he can *use* the natural language as a resource for hearing and seeing as they do. What are then reported are members' repairs of indexical

expressions and not the way in which such work is accomplished. Here, then seems to be an important distinction between the concerns of ethnomethodology on the one hand, and symbolic interactionism and phenomenological orientations to sociology on the other.
(*ibid.*, p. 183, author's italics)

Ethnomethodologists are not interested in the endless elaboration of indexical particulars or in the simple reportage of repairs that members do, *but are concerned with the discovery of members' methods for repairing indexical particulars.*
(*ibid.*, p. 183, my italics)

Since ethnomethodologists are interested in investigating the complex nature of social interaction and, specifically, the ways in which people cope with ambiguity, it seems to me that this approach to sociology is both a natural fit – methodologically speaking – with research into the social interactional and communicational difficulties associated with autism, and that the topic at the heart of ethnomethodology is of direct relevance to autism since the very nature of autism is that it involves an inability, or reduced ability, to cope with the complexities of social interaction and, especially, the complicated nature of language.

Clearly, a lack of ability to cope with the complexities of social interaction (including the language used in social interaction) will make it that much more difficult for persons with autism to assimilate into a group of people or into society more generally. The work of the ethnomethodologists suggests that their research techniques should facilitate enquiry into *how* those with autism attempt to make up for the problems they face in social interaction and social communication; whilst a more traditional approach using language as a resource to undertake sociological enquiry may be of advantage in seeking to determine *what* autistic people make of their being-in-the-world i.e., to develop an autistic ontology. As Geils and Knoetze write from their avowedly social constructionist perspective:

Disturbances of speech, language, and communication are a primary diagnostic feature of the autistic syndrome. Since our research paradigm considers language and interaction to be central to the construction of meaning, self, and reality, and the areas of language and social interaction are pivotal to autism, a social constructionist approach is considered to raise important issues as to the *doing of life itself* for those with similar impairment. (Geils and Knoetze, 2008, p. 203, authors' italics)

Perhaps, at this stage, an example will demonstrate what I mean by ethnomethodology being of direct relevance to autism *because of the latter's association with difficulties with the complexities of the social interaction and natural language that lie at the heart of social organisation and form the matter of ethnomethodological research* thus making ethnomethodology a natural fit – methodologically speaking – with research into the underlying features of autism. To introduce the example I need to quote three short case studies from Garfinkel's conversation clarification experiment (reproduced by Heritage) in which, to upset normal conversational practice, he instructed some of his students to 'engage an acquaintance or friend in an ordinary conversation and, without indicating that what the experimenter was saying was in any way out of the ordinary, to insist that the person clarify the sense of his (sic) commonplace remarks'⁶³ (Garfinkel, 1963, p. 221).

Case 1: The subject was telling the experimenter, a member of the subject's car pool, about having had a flat tire while going to work the previous day.

S: I had a flat tire.

E: What do you mean, you had a flat tire?

She appeared momentarily stunned. Then she answered in a hostile way:

'What do you mean? What do you mean? A flat tire is a flat tire. That is what I meant. Nothing special. What a crazy question!'

Case 3: On Friday night my husband and I were watching television. My husband remarked that he was tired. I asked, 'How are you tired? Physically, mentally, or just bored?'

S: I don't know, I guess physically, mainly.

E: You mean that your muscles ache, or your bones?

S: I guess so. Don't be so technical.

(After more watching)

⁶³ In each of these conversations between Garfinkel's student experimenters and their friends, the experimenters are referred to as 'E' and the friends and acquaintances (the subjects) as 'S'.

S: All these old movies have the same kind of old iron bedstead in them.

E: What do you mean? Do you mean all old movies, or some of them, or just ones you have seen?

S: What's the matter with you? You know what I mean.

E: I wish you would be more specific.

S: You know what I mean! Drop dead!

Case 6: The victim waved his hand cheerily.

S: How are you?

E: How am I in regard to what? My health, my finance, my school work, my piece of mind, my ...

S: (Red in the face and suddenly out of control.) Look! I was just trying to be polite. Frankly, I don't give a damn how you are.

(Garfinkel, 1963, pp. 221-2; Heritage, 1984, p. 80)

Heritage remarks in relation to this Garfinkel experiment that 'It is noticeable that the E's breaches of this requirement [the requirement that conversational partners would make sense of their talk through adopting common-sense understandings of the words used, NC] resulted in interactional breakdowns which were extraordinarily rapid and complete and, as such, surprising in their extent even to Garfinkel himself' (Heritage, 1984, p. 81). Case 3 reminds me of a specific conversation I recall between an adult with AS and an NT adult, and the very sudden breakdown of the three conversations, together with the 'out of control' nature of the subject in Case 6, remind me of a further conversation between AS and NT adults I have been a party to and which, in my view, may have a bearing on autistic meltdowns⁶⁴. The two conversations (recalled some time after the events but with the gist of each conversation recalled accurately if not the actual words) are as follows:

Case 1: The subject was chatting to a PNT work colleague about films and it was the middle 1980s when the actress Meryl Streep had starred in a succession of successful films and had a very high public profile.

AS: (Jokingly) Meryl Streep seems to be in every hit film nowadays!

⁶⁴ When an autistic person's cognition is overwhelmed by an excess of sensory input, by confusing interaction that defeats their interpretation skills or the like the reaction may be an autistic 'meltdown', which can *appear* similar to a tantrum, or an autistic 'shutdown' where they cease reacting to further input temporarily. Milton describes meltdowns and shutdowns as "extreme expressions of the 'fight or flight' response" (Milton, 2012).

NT: What do you mean, she appears in every film? I can think of a lot of films she hasn't been in.

Like Garfinkel's Case 1 subject, the person with AS appeared momentarily stunned by this response (which appeared to be a deliberate attempt to confuse the conversational partner), attempted to list some of the films he was referring to and allowed the conversation to tail off.

Case 2: In this case the adult with AS was having lunch in a public house with his PNT wife and elderly parents (aged in their 80s). The details of the conversation are too unclear after the passage of time to be 'quoted' but the actual words are not important; what matters is that the husband and wife were talking and the AS adult was confused by a form of words which suggested to him that his wife was being critical of him (in front of his parents) although he knew that his wife would not behave in that manner. It seems that his inability to reconcile the two perspectives caused him to completely 'lose it' to use the vernacular. He suddenly stood up and responded in a loud voice causing his mother to cry. Interestingly, the AS adult's wife was also extremely upset, losing her usually calm exterior. One of the parents of the AS adult had to calm *both* the AS adult and his wife down by using soothing words and moving the group to the other end of the building.

(Chown, unpublished notes, p. 2)

The reactions of (presumably) PNT subjects in Garfinkel's experiment seem akin to me to the reactions of the AS adult in the first of my two case studies and, of particular interest, of both the AS *and* PNT adults in the second case study. Whilst the interactional breakdowns in Garfinkel's experiment were induced (provoked) and the breakdowns in the cases I describe (both in terms of the conversation and loss of control in the second case) were a natural result of the course of conversation, the common factor appears to be a failure to make 'recognizable sense' (Heritage, 1984, p. 81) of the talk. In the first case that simply meant that the AS adult was confused and unable to continue the conversation after making a half-hearted attempt to list the films of Meryl Streep; potentially of more significance is that both parties to the second conversation – the AS *and* PNT adults – lost control in Garfinkel's terms to some extent (albeit only the AS adult would have been noticeably out of control to the other patrons of the public house). What does this suggest? Heritage writes that 'Garfinkel extensively demonstrated in his "conversation clarification experiment", ... in any

two-party conversation, much that is being talked about is not mentioned, although each expects that the adequate sense of the matter being talked about is settled' (Heritage, 1984, p. 81). I think that it may be possible to interpret autistic meltdowns that occur in two-party conversation as examples of situations where an "adequate sense of the matter being talked about" is not settled between the two parties to the conversation. In other autistic meltdowns it may be hypothesised that the breakdown occurs because the person with autism is overwhelmed by their failure to interpret incoming signals correctly; either a single direction breakdown (Case 1) or a bi-directional breakdown (Case 2). The fact that the PNT adult also lost control in the second incident confirms to me that this particular incident is an example of what Heritage describes as the '*idealization of the congruency of the system of relevances*' (Heritage, 1984, p. 55, author's italics) in Schutz's 'general thesis of reciprocal perspectives'. This means that when interacting with someone a person assumes, for the purposes of the interaction, that the other party interprets the elements of the interaction – including the form of words used in conversation – similarly, or more accurately, in 'at least an 'empirically identical' manner, i.e. one sufficient for all practical purposes' (Schutz quoted in Heritage, 1984, p. 55).

In all this I am simply suggesting that meltdowns (and shutdowns as well) in autism may be the manifestation of an autistic person's loss of control when confronted with a breakdown in the 'reciprocity of perspectives'⁶⁵ (Heritage, 1984, p. 82) that daily life is founded on. One would expect that such breakdowns between PNT people would be few and far between but that their incidence would be much greater where an autistic person is involved. In other words, I hypothesise that Garfinkel's theory of social interaction, based on Schutz's general

⁶⁵ As in my Case 1 the autistic person regarded the response to his comment as a deliberate attempt to confuse him, it is of interest to note that Heritage writes of Garfinkel's conversation clarification experiment that in the event of breaches of the reciprocity of perspectives subjects 'analysed the experimenters' behaviours as involving "active", i.e. "chosen" or "motivated", *departures* from the normal which ... they viewed as *illegitimate and offensive*' (Heritage, 1984, pp.98-99, the first italics are the author's and the second are mine).

thesis of reciprocal perspectives, may explain at least some autistic breakdowns. I propose, therefore, that meltdowns and shutdowns are not specific to autism but are a manifestation of a person's failure to develop the reciprocity of perspectives necessary for normal social interaction and thus can be experienced by PNT people as well as autistics (albeit those with autism are at much greater risk of such interactional breakdowns).

Before bringing this chapter to a conclusion I want to refer again to 'Agnes' (Garfinkel, 1963; Heritage, 1984) in order to clarify the nature of what I considered earlier to be 'an analogy to be drawn here with autism in the sense that fitting in can be a managed production in both cases' (p. 67). The case of autism is clearly different from that of someone like Agnes who, born as one sex, attempts to pass as the opposite sex, but where a person diagnosed with autism seeks to 'fit in' to NT society by not declaring their autism they can be considered to be attempting to pass as NT, whether deliberately or not. Agnes deliberately attempted to pass as female despite being born male and was so successful at this that she convinced her medical advisers that they should undertake a sex change operation as she was a 'normal, natural female' (Heritage, 1984, p. 195) and also convinced her boyfriend of her status as female. To achieve these ends she needed to be a 'student of normal sexuality' (ibid., p. 195) such that she could successfully identify and reproduce 'the observable-tellable normal sexuality of (female) persons, and do so only, entirely, exclusively in actual, singular, particular occasions through actual witnessed displays of common talk and conduct' (Garfinkel, cited in Heritage, 1984, p. 196). In other words, whereas the sexed nature of females' talk and conduct is a routine, commonplace phenomenon hidden in plain sight, the sexed nature of Agnes' talk and conduct was a managed production on her part to achieve a specific end i.e., to be considered by everyone who met her as a normal, natural female. Where a person with autism attempts to fit in to society they may not deliberately seek to

mimic PNT talk and conduct – indeed it is argued that the very nature of autism as cognitive difference would prevent them from doing this effectively – but they are, nonetheless, attempting to pass as PNT as best they can (by such means as avoiding talk or conduct that they know may be interpreted by PNT individuals as odd, laughing when others laugh despite not seeing the funny side, forcing themselves to socialise even if uncomfortable doing so).

There are both similarities and differences between Agnes and the autistic passer. For instance, both are aware that they are different from those they are attempting to copy. But whilst Agnes had the male PNT person's ability to understand female talk and conduct as well as any other male PNT person actively seeking to learn such talk and conduct, the autistic passer, like any other person with autism, has the typical autistic difficulties in the areas of social communication and social interaction that will make it far more of a problem for them to learn specific ways of talking and conducting themselves.⁶⁶ In both cases they can only achieve their objective of passing through 'unnoticed, but *unremitting*, work' (Heritage, 1984, p. 197, my italics). But although Agnes had the 'advantage' of being able to copy differences in talk and conduct that are to a great extent familiar to every typically developing human being, and that can be seen and heard every day, the autistic passer is in the position of having to try and understand differences in talk and conduct that are not well understood and where, generally speaking, they only have themselves to exemplify the talk and conduct associated with autism. I do not propose to try and list all the similarities and differences here, and the balance of difference and similarity does not matter; my key point simply being that, as both involve a managed production, study of either will enable a

⁶⁶ I must make it clear that the impairment referred to here is *cross-neurological* in nature. By this I mean that it only arises when persons from different neurotypes interact. For example, two autistic individuals may interact with no sign of any impaired functioning either socially or communicatively; communicative difficulties are most likely to arise when an autistic person interacts with someone from the PNT.

researcher to better understand a particular type of talk and conduct; feminine with Agnes, autistic⁶⁷ in the case of the person with autism.

A feature of Agnes' situation mentioned by Heritage – that she 'repeatedly complained of her lack of an appropriate [female, NC] biography' (Heritage, 1984, p. 130-131) – may be informative in the context of autism. I will try to explain what I mean by this. In a similar manner to Agnes who, having been born and brought up as a male child, lacked an "appropriate biography" to assist her in explaining herself to others in female terms, an autistic person, because they often socialise far less than PNT people, may have a limited biography in comparison to an PNT person of the same age and thus be at a disadvantage in relation to social talk and conduct⁶⁸ *through lack of experience of how to engage in such talk and conduct*. It seems to me that an initial difficulty with the pragmatic elements of natural language may, from an early age, cause the talk and conduct of a person with autism to appear (and be) different with the result that they find it difficult to be accepted by their peers which, in turn, means that they socialise less (a vicious circle). This process adversely impacts on their development of, already below par, language pragmatics. In Agnes' situation the lack of an appropriate biography directly impacted on her ability to explain herself as female whereas the autistic person's limited biography may result from delayed pragmatic aspects of language development that adversely impacts on their ability to pass as PNT via its detrimental effects on normal socialisation practices. Heritage concludes his introduction to CA by writing that:

⁶⁷ It might be thought that this should be a reference to PNT talk and conduct as being directly analogous with feminine talk and conduct in this situation, and it may well be that clues will be provided to PNT talk and conduct, but, in my view, the difficulties an autistic person will have in attempting to mimic PNT talk and conduct suggests that it is more likely, in this case, that an ethnomethodological approach will enable the identification of talk and conduct that a person with autism will need to *avoid* in order to pass.

⁶⁸ Clearly, all talk and conduct is social in nature in that, by definition, it involves other people; by "social talk and conduct" I am referring to the kind of talk and conduct involved when people socialise in the lay sense of that word e.g., when being with friends.

Without a detailed texture of institutionalized methods of talking to orient to, social actors would inevitably lose their cognitive bearings. *Under such circumstances, they would become incapable both of interpreting the actions of co-participants and of formulating their own particular courses of action.*" (Heritage, 1984, p. 292, my italics)

This exposition is intended to demonstrate the value of ethnomethodological enquiry in autism; specifically, the intention behind the comments on the analogy been Garfinkel's Agnes and the situation in which an autistic person finds themselves is to show how valuable ethnomethodological enquiry can be in deciding upon suitable autistic methodology.

Berger and Luckmann write that language is 'the most important instrument of socialization' (Berger and Luckmann, 1966, p. 153). It is my belief that autism damages, to a greater or lesser extent, the autistic person's ability to understand other people's actions, to act themselves, and to become fully socialized into their culture. I think that a difficulty in understanding others' acts (including speech acts) and in initiating their own acts (including speech acts) constitutes the social communication impairment seen in autism and lies at the heart of the social interaction and social imagination impairments⁶⁹. As Heritage's comments suggest, difficulties with understanding the acts of others and initiating their own acts arise from a failure of the autistic actor to fully develop (or to develop at all) the 'detailed texture of institutionalized methods of talking' (ibid., p. 292) which causes them to 'lose their cognitive bearings' (ibid., p. 292) with the concomitant social effects.

After considering my philosophical and methodological positioning (in Chapter II), it was possible to review the various conceptual issues I felt may have a bearing on the achievement

⁶⁹ The effects of the impairments in social communication, interaction and imagination associated with autism will be compounded where there is an intellectual disability in addition to the autism.

of a linguistic understanding of autism. In this chapter I have reviewed Wittgenstein's 'language-games', Habermas' theory of communicative action, double and triple contingency, and Searle's Background (relative to Bourdieu's habitus), concluding that:

1. It is possible that autism might involve a difficulty with developing an understanding of *language-games* during a child's formative years;
2. A difficulty with language-games would result in an individual developing a different '*Background*' (a Background that, all else being equal, would tend to differ from a typically developing (PNT) background); and
3. The sociocognitive aspect of the concept of contingency may also contribute towards an understanding of autism in that autistic people have difficulty understanding what is happening in the 'to and fro' of the interaction with another person (an effect of *double contingency*), and difficulty adopting an objective stance on the interrelation of perspectives in the interaction and thus in being able to generalise patterns of interaction into norms or 'rules' (an effect of *triple contingency*).

CHAPTER IV

MY APPROACH TO RESEARCHING AUTISTIC LANGUAGE METHODS

In the light of my conclusions in the previous chapter that: (1) autism may involve a difficulty with developing an understanding of *language-games* during a child's formative years; (2) that a difficulty with language-games would result in an autistic individual developing a different '*habitus*' to their PNT peers (everything else being equal); and (3) that the sociocognitive aspect of *double and triple contingency* may affect socialisation (including generalisation of societal norms), I now feel able to select suitable methods to use in my language methods research informed by this developing conceptual understanding.

O'Neil is one of many psychologists who have demonstrated the legacy this field has in philosophy, commencing his book on 'The Beginnings of Modern Psychology' with a brief look at what he referred to as 'The long philosophical past' (O'Neil, 1982, p. 8). Although one might consider that this extensive philosophical legacy would have provided the 'junior' field with a good grounding some psychologists clearly appreciate this is not necessarily the case; for example, the psychologist Michael Eysenck⁷⁰ having written the following:

Cognitive psychology often seems to resemble the messenger in *Alice in Wonderland* who went in all directions at once. The author would like to be able to transform all of this confusion and uncertainty into systematic coherence, but has instead opted for the more modest ... goal of describing contemporary cognitive psychology as clearly as possible.
(Eysenck, 1984, p. 1, author's italics)

⁷⁰ Michael Eysenck is the academic psychologist son of the experimental psychologist Hans Jürgen Eysenck known for his work on personality and intelligence.

Conversation analysis and autism

I aim to demonstrate that CA, which has roots in ethnomethodology and is fundamentally aligned to grounded theory by being entirely data-based due to a ‘rejection of premature theorizing’ (Wooffitt, 2005, p. 186)⁷¹, and narrative analysis, which, with its use of induction to identify themes, is also closely aligned with grounded theory⁷², can be used to develop grounded theory; also that CA, narrative analysis, and grounded theory fit especially well with an ethnomethodological approach to research, to each other, and to investigation of autistic language. Ethnomethodology and CA also both have an affinity with the Wittgenstein ‘form of life’⁷³ concept which, as Maynard and Peräkylä write, is one approach (the one to which I subscribe) to solving the problem of determining how people understand indexical expressions – through placing a primary analytic focus on ‘orderly linguistic practice’ (Maynard and Peräkylä, 2003, p. 245). A further point to make here is that CA ‘is helpful in bridging interpersonal and socio-cultural dimensions of social functioning’ (Ochs et al., 2004, p. 156), an important issue if (as I do) one subscribes to these authors’ view that the failure to fully develop socio-cultural acumen⁷⁴ is a causative factor in the social difficulties seen in autism alongside difficulties with theory of mind (ibid.).

The article by Sterponi and Fasulo on intersubjectivity and progressivity in the communication of a child with autism is a very clear demonstration of what CA can achieve

⁷¹ As with grounded theory, ‘no hypotheses underpin the collection of data with the Conversation Analysis framework, rather these are induced from the data itself’ (Dobbinson, Perkins and Boucher, 1998, p. 114).

⁷² Riessman writes that ‘As GROUNDED THEORISTS do, investigators [using narrative analysis, NC] collect many stories and inductively create conceptual groupings from the data’ (Riessman, 2005, p. 2, author’s capitals).

⁷³ In their analysis of language and social interaction, Maynard and Peräkylä write that ‘Wittgenstein (1958) argues that language, rather than being a vehicle for naming things, conveying information, or even enacting intentions according to rules, is an *activity* or *form of life* in its own right’ (Maynard and Peräkylä, 2003, p. 237, authors’ italics). One of my abiding interests is in trying to determine whether or not autistic language use – both verbal and written – can be regarded as a type of Wittgensteinian activity and language-game.

⁷⁴ Ochs et al. write that for speech acts to be effective an individual requires socio-cultural acumen in addition to interpersonal skills. They regard their concept of socio-cultural acumen as comprising of an awareness of: socio-cultural conventions, social roles, social activities in which speech acts are embedded, default states associated with performers of speech acts, and conventional interactional moves (Ochs et al., 2004).

in the domain of autism and it is notable, at least for me, that these authors make connections between the language of the child they study with an aspect of the language used by the titular character in a book of fiction (*Bartleby the Scrivener*⁷⁵) written by an author – Herman Melville⁷⁶ – thought to have been autistic (Brown, 2010; Sterponi and Fasulo, 2010). Rendle-Short writes that CA “provides a ‘powerful lens’ for examining social activity through its rigorous and finely-grained analysis of talk-in-interaction (which) is important given the subtle social and pragmatic difficulties experienced by children with AS” (Rendle-Short, in press). Whilst other scholars have questioned the claims of the ethnomethodologists in relation to CA (e.g., Segerdahl) – and I will comment suitably on their counterclaims later on – even Segerdahl stresses the practical value of the CA technique ‘to treat practical conversation problems’ (Segerdahl, 1998, p. 315) and, in relation to autism, writes:

Since conversation analysis focuses on features of conversations that tend to be absent in autistic persons’ conversations, conversation analysts might aid developing a way of diagnosing autism. Moreover, since autistic persons tend to become confused by many of the extrovert features of our conversations that CA focuses on, perhaps conversation analysts could help designing an educational program for people working with autistic persons, where the point is to teach the staff to *avoid* those features, and to develop a conversational style that suits autistic persons. An alternative task might be to design an educational program for teaching autistic persons to use certain conventions of conversation mechanically (for many of these conventions do not mean anything to them). (Segerdahl, 1998, p. 318, author’s italics)

Whilst Segerdahl suggests that CA may have a role to play in relation to autism, if I am to use it in my research I must bear in mind what Emanuel Schegloff – a close colleague of Harvey Sacks who was instrumental in the development of CA – called ‘theoretical imperialism’, by which he meant that in order to hear the voice of the participants in a piece of CA research the analyst must avoid imposing his or her interests on the conversations i.e., hearing things

⁷⁵ A scrivener was a person employed in a lawyer’s office – before the days of typewriters, let alone desktop computers – to write up legal documents. I discuss Melville’s book in Chapter VI.

⁷⁶ I discuss Melville’s apparent autism in Chapter VI.

that the participants did not actually say but that the analyst reads into the talk (Schegloff, 1997). Why is this an issue as regards the use of CA in relation to autism? The issue arises from an interpretation of Kitzinger's views on the subject of CA and gender and in drawing an analogy between gender and disability, specifically autism. If I have understood Kitzinger correctly, she thinks that the CA principle of always aiming to hear the voices of the research participants is 'incompatible with the traditional treatment of gender as a sociological variable' (Kitzinger, 2000, p. 169) since treating gender as a variable involves the imposition of the researcher's viewpoint on the talk 'unless the participants themselves make gender relevant' (ibid., p. 169). Kitzinger writes that 'to pursue sex-differences research [sex-differences in talk, NC] ... is undoubtedly to violate some of the most fundamental ethnomethodological assumptions on which CA is based' (ibid., p. 170). As disability and autism are as much sociological variables as gender, it seems Kitzinger would also regard a comparison of autistic conversation and PNT conversation as breaching ethnomethodology's principles. Her way out of this dilemma is to remind herself that gender and sexuality are socially constructed and instead of asking "how do women and men talk differently?", asking how particular forms of talk contribute to the production of people as "women" and as "men" (ibid., p. 170)⁷⁷. Drawing the analogy again, it might be asked how forms of talk *contribute to the production of people as autistic*.

Listening to (and reading) the autistic voice

I fully agree with Smukler and Ferguson's perspective on the autistic voice. They write that:

⁷⁷ I find Kitzinger's apparent assumption that neither "gender" nor "sexuality" should be presupposed when undertaking conversation analysis inconsistent with her attitude to other sociological variables. She appears to think that "sexism", "heterosexism" and "racism" can be read into a conversation 'without violating the precepts of CA' (Kitzinger, 2000, p. 172) because Sacks draws attention to "white privilege" and "class privilege" in one of his lectures and is thereby enabled to identify a participant's talk as racist. Kitzinger writes that 'Sacks is able to analyse (this) account as an instance of mundane ordinary everyday racism-in-action' by 'giving careful attention to the participant's *own* orientation to the events she is recounting' (ibid., p. 172, author's italics) despite having previously stated that the participants did *not* orient to either white privilege or class privilege. This seems to suggest that Sacks may be guilty of theoretical imperialism or Kitzinger or I have misconstrued something here. But I agree with Kitzinger that the CA orientation principle should not be followed too rigidly.

Incorporating autistic voices into representations of autism offers an important counterbalance to professional limitations by challenging us to reinterpret autism as a form of human variation instead of human insufficiency. A process of including first-person perspectives of autistic people is the only way that definitions based on difference rather than deficits will emerge to change negative social constructions of autism (Smukler and Ferguson, 2005, p. 22).

Following Sacks, in order to hear the voices of the research participants rather than my voice as researcher, I was required to use naturally occurring data⁷⁸ by listening to autistics in the course of natural conversation (or in a natural written form) unaffected by my presence as researcher and unsullied by any artificial context. This necessitated listening to actual conversations – whether that be a person in discussion with a clinician in a diagnostic session, or in conversation with friends – reading books written by persons with autism without the help of ghostwriters, or working with other unadulterated verbal or written data. Sourcing written data for my project was a relatively unproblematic matter. However, sourcing verbal data presented a serious problem. In the latter case my initial aim was to undertake my own CA-based field work working with autistic adults in *naturalistic* settings, recording their talk, and transcribing it along CA lines. However, logistical problems associated with this ‘ideal’ approach (which are heightened when a researcher is working alone) made the development of new verbal data an impractical proposition. Unfortunately, whilst language is a ‘central resource’⁷⁹ in the research process’ (Wooffitt, p. 22) there is a shortage of existing transcribed autistic language on which a research project such as mine could be focused. In the absence of new verbal data I was restricted to extant CA transcriptions in the autism literature.

⁷⁸ Hutchby and Wooffitt write that Sacks’ work was based on ‘The hypothesis ... that ordinary conversation may be a deeply ordered, structurally organized phenomenon (which) could best be explored, in Sacks’ view, by using recorded data of naturally occurring talk’ (Hutchby and Wooffitt, 2008, p. 15).

⁷⁹ In highlighting language as a sociological *resource* Wooffitt is drawing a comparison with language as the ‘topic of sociological research’ (Wooffitt, 2005, p. 22, author’s italics). Hence, this reverses the point often made by ethnomethodologists who highlight language as a *topic* of research rather than a resource.

In keeping with the methodological prescriptions of ethnomethodology and CA, I have tried to avoid bringing any preconceived notions to bear when undertaking an *initial analysis*⁸⁰ of specific instances of talk-in-interaction. Of course, any transcription system must involve preconceived notions (hypotheses) and, therefore, cannot be fully neutral; a point made by Kendon when writing: 'It is a mistake to think that there can be a truly neutral transcription system, which, if only we had it, we could then use to produce transcriptions suitable for any kind of investigation ... Transcriptions, thus, embody hypotheses' (Kendon, 1982, p. 478). A pre-conceived notion driving my research project was a hypothesis that ordinary talk-in-interaction involving autistics (with or without PNT persons) would involve a *different structural organisation*⁸¹ than is the case with talk-in-interaction between PNT individuals.

Narrative analysis and autism

As Cortazzi wrote a number of years ago (not that much appears to have changed), 'Narrative analysis is rarely mentioned in research handbooks' (Cortazzi, 1994, p. 163). For instance, Robson's 'Real World Research' makes one mention of narrative accounts (there is no mention of narrative analysis per se) distinguishing it from coded schedules in the context of writing up research data i.e., narrative as a vehicle for expressing data rather than narrative *as* data. But there are honourable exceptions such as 'Analyzing Qualitative Data' by Graham Gibbs and 'The Sage Handbook of Social Research Methods' edited by Alasuutari, Bickman and Brannen. Gibbs devotes a whole chapter to the analysis of biographies and narratives in addition to a further chapter on comparative analysis; I have been guided by his advice in particular. As human beings use the narrative form to tell stories – an approach that enables

⁸⁰ Hutchby and Wooffitt write that 'Analysis should not *initially* be constrained by prior theoretical assumptions' (Hutchby and Wooffitt, 2008, p. 20, my italics). I take this to mean that the first stage in CA is for a researcher to analyse talk-in-interaction data on its own terms, keeping an open mind as to where the analysis will lead, but that matters such as relevance of talk-in-interaction to sociological variables may be considered in subsequent analysis of data analysed initially on its own terms.

⁸¹ My hypothesis mirrors the hypothesis driving Sacks' work as described by Hutchby and Wooffitt (Hutchby and Wooffitt, 2008). Both hypotheses relate to talk-in-interaction *in general*; there being no intention in Sacks' case to hypothesise about specific instances of talk-in-interaction, nor, I hasten to add, in mine.

them to make sense of their lives and of the events along the way – Gibbs writes that ‘careful analysis of topics, content, style, context and the telling of narratives will reveal people’s understanding of the meanings of key events in their lives or their communities and the cultural contexts in which they live’ (Gibbs, 2007, p. 56). Usefully, he sets out one possible process for analysing a narrative which is reproduced in a truncated form below:

1. Read and re-read the transcript to familiarize yourself with the structure and content of the narrative or narratives. Look for examples of common content and themes (he lists the things that should be looked for).
 2. Prepare a short, written summary to identify key features.
 3. Use the right-hand margin of the transcript to *note thematic ideas* and structural points. Look for transitions between themes.
 4. *Take notes/memos about the ideas you have.*
 5. Mark (with pen or pencil) any embedded mini-stories or sub-plots. Use arrows to indicate linkages between elements.
 6. Highlight or circle emotive language, imagery, use of metaphors and passages about the narrator’s feelings.
 7. *Code thematic ideas* and develop a coding frame.
 8. Later in your analysis, begin to connect the ideas you have developed about the narrative with the broader theoretical literature.
 9. *Undertake case-by-case comparisons (e.g. thematically).*
- (*ibid.*, pp. 63-64, my italics)

In its emphasis on the identification of themes, development and application of a system of coding of thematic ideas, writing of memos, and use of comparison (which could, perhaps, be better described as *constant comparison*) Gibbs’ proposed process for analysing narrative is redolent of the approach adopted for developing grounded theory (grounded theory is a theme that runs through Gibbs’ book). Although their guidance has not been followed to the letter, I have taken a thematic approach, written memos regarding the identified themes, and, perhaps most importantly, undertaken case-by-case comparisons (both between the various books that have provided my data and between the authors of these books) as well as following the spirit of the advice as much as possible. Of course, the narratives that interest me are literary narratives by people with autism an analysis of which may enable the identification of aspects

of texts that *reflect autism*, not the narrative *ability* of people with autism or the narratives *of* autism that provide the focus of much of the literature on narratives in autism (e.g., Colle et al., 2007b; Diehl et al., 2006; Waltz, 2005). The themes, of course, are the ‘symptoms’ of autism that may be reflected in the text of a narrative by an autistic author.

The research questions

The research question set went through various iterations as the literature review progressed with research questions (RQs) 1), 2), 3) and 5) being finalised on completion of the initial phase of the review (i.e., to the point where I decided to commence the reviews of autistic talk-in-interaction and autistic writing). RQ 5) was added to the question set as a result of my having read articles making reference to Wittgenstein’s concept of the language-game in relation to autism. At that stage I read Wittgenstein’s ‘Philosophical Investigations’, commentaries by McGinn and Pitcher on Wittgenstein’s work and some carefully selected articles on aspects of language-games relating to my subject. After completing a first draft of the thesis it was suggested to me that ‘Habermas could be very productively added to my developing pragmatics ... as (Habermas) has done what was missing in (Wittgenstein), that is to develop the ‘universal rules’ of language games through his theory of communicative action’ (Garland, P., 2012)⁸².

My initial interest in autistic talk-in-interaction and autistic writing was a view, predating work on this thesis, that there may be specific features of such talk and writing that were reflections of their autism i.e., that it might be possible to identify autism in an individual simply through listening to them talk or by reading their narrative writing without knowing in advance that they were autistic or, at least, to find evidence of autism in someone known to

⁸² I am grateful to Paul Garland for pointing me in the direction of Habermas; it would have been a significant omission had I not taken the theory of communicative action into account, although, having done so, it is my view that Habermas does not contribute significantly in the present context.

have been diagnosed with autism or AS. Hence the inclusion of research question 1 (RQ 1) – “What, if any, specific features of the talk-in-interaction and narrative writing of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?” requiring a detailed analysis of autistic talk-in-interaction and autistic writing. If it appeared that certain features of autistic talk-in-interaction and autistic writing were specific to autism then the obvious next question (RQ 2) was to ask myself whether any effect of autism on talk-in-interaction might have a similar effect on writing and vice versa in order to try and determine whether there were any aspects of autism that affected autistic communication in general i.e., “What, if any, commonality between autistic talk-in-interaction and autistic narrative writing is agreed upon or contested in the field or can be discovered?”. During the literature review, when I came across the concepts of recipient design (Sacks, Schegloff and Jefferson, 1974) and writer-based prose (Flower, 1979), it seemed possible that failure to take account of the needs of the listener (recipient design) might reflect the same underlying issue as failure to write with the needs of the reader in mind (writer-based prose) which led to the inclusion of RQ3 – “Do the apparently analogous concepts of ‘recipient design (failure of)’ and ‘writer-based prose’ help to explain autistic talk-in-interaction and autistic narrative writing?”. My reading of Wittgenstein caused me to ask whether there might be an autistic language-game and form of life (RQ 4) – “Do the features of autistic talk-in-interaction and autistic writing, whatever they may be, constitute a ‘language-game’ associated with an autistic culture or ‘form of life’?” (which, in hindsight, proved to be the wrong question to ask but which led to me questioning whether persons with autism might have problems with the language-games that all members of a society must have a grounding in to be competent members of the society). Finally, if it proved possible to isolate some specific features of autistic talk-in-interaction and autistic writing, I felt it was important to try to understand if any current theory (or synthesis of theory) of autism could explain the appearance of such

features adequately or at all, hence RQ 5 – “Which theory (or theories) of autism best explains the features of autistic talk-in-interaction and autistic narrative writing that are agreed upon or contested in the field or can be discovered?”.

The specific research questions this thesis is intended to respond to are set out below.

Research Questions

- 1) What, if any, specific features of the talk-in-interaction and narrative writing of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?
- 2) What, if any, commonality between autistic talk-in-interaction and autistic narrative writing is agreed upon or contested in the field or can be discovered?
- 3) Do the apparently analogous concepts of ‘recipient design (failure of)’⁸³ and ‘writer-based prose’⁸⁴ help to explain autistic talk-in-interaction and autistic narrative writing?
- 4) Do the features of autistic talk-in-interaction and autistic writing, whatever they may be, constitute a ‘language-game’ associated with an autistic culture or ‘form of life’⁸⁵?
- 5) Which theory (or theories) of autism best explains the features of autistic talk-in-interaction and autistic narrative writing that are agreed upon or contested in the field or can be discovered?

To respond to the above research questions I have undertaken the following projects:

1. Identification and review of all extant autistic talk-in-interaction⁸⁶ recorded in peer-reviewed papers by conversation analysts⁸⁷ followed by re-analysis as necessary;

⁸³ Recipient design is a lesser known concept from conversation analysis (Jefferson, 1996), a failure of which appears to be very similar in concept to egocentric speech (Piaget, 1926; Vygotsky, 1986).

⁸⁴ (Flower, 1979).

⁸⁵ (Wittgenstein, 1958).

⁸⁶ There is a parallel between autistic talk and autistic non-verbal behaviour since many researchers have shown that non-verbal behaviours can have communicational intent. Hence, it is my view that some of the ideas expressed in this thesis relating to autistic talk may have application to autistic non-verbal behaviours. This would enable the extension of these ideas to non-verbal autistic individuals. I could be criticised for apparently

2. Identification and review of a selection of narrative texts by autistic authors (either known to have autism or who have been 'diagnosed' retrospectively by others);
3. A synthesis of the findings from the first two projects to include consideration of any conclusions that may be drawn regarding each of the research questions together with a discussion of my hypothesis that a significant aspect of autism is a delay in developing, or lack of, an understanding of the primary social use of language and the means by which language facilitates specific social interactional situations (i.e., language-games), and the development of a typology of features of autistic talk-in-interaction and writing encompassing the strengths associated with autism as well as weaknesses.

I shall continue by reporting on my reviews of autistic talk-in-interaction (Chapter V) before going on to review autistic narrative writing (Chapter VI), develop a synthesis of the reviews of talk and writing (Chapter VII), and consider autism theory in the succeeding chapters.

ignoring non-verbal persons with autism but this thesis focuses on talk not because of a lack of regard for such individuals but because there is no means of capturing autistic non-verbal behaviour (to complement CA), and a distinct lack of non-verbal research data. *This makes me wonder whether a standard form of transcription for autistic non-verbal behaviour-in-interaction is feasible.* It can be argued that if researchers were able to transcribe non-verbal autistic communication they could listen to the non-verbal autistic 'voice'.

⁸⁷ As conversation analysts work on the principle of routinely making the transcripts of the text they analyse available for others to review in their papers, some autistic talk-in-interaction is in the public domain (although not much). It has been argued that the sound recordings should also be made available on request (Hutchby and Wooffitt, 2008). However, I have not needed to access sound recordings for the purposes of this thesis.

CHAPTER V

REVIEW OF PUBLISHED AUTISTIC TALK-IN-INTERACTION

The limits of my language mean the limits of my world.
(Wittgenstein, 1922, § 5.6, author's italics)

Making reference to the fact that many people with autism do not learn to speak at all, and following Schreibman et al., the psychologists Phelps and Grabowski wrote that 'The most characteristic feature of autistic language is its non-existence' (Phelps and Grabowski, 1991, p. 302). My primary interest is in the features of actual autistic language with this chapter reporting on the first stage of the research responding to the talk-in-interaction element of Research Question 1: "What, if any, specific features of the *talk-in-interaction* and narrative writing of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?". In this investigation I want to hear the autistic voice in the course of natural conversation unsullied as far as possible by an artificial research context, and with ethnomethodological principles in mind. This involved the following *initial analysis* of about 3,450 lines of extant autistic SSJ-type CA⁸⁸ culled from articles in peer-reviewed journals i.e., without attempting to identify specific features of autistic talk-in-interaction at this stage of the research process. The review reported on in this chapter is an attempt to bring together in one place a summary of the findings of autism researchers using CA. Chapter VI will then summarise my review of autistic narrative writing data in response to the writing element of

⁸⁸ A list of conversation analysis transcription symbols developed by Gail Jefferson is at Appendix A.

the RQ “What, if any, specific features of the talk-in-interaction and *narrative writing* of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?” as with the current chapter, again without attempting to identify specific features relating to autism. Chapter VII will identify and discuss features that may be specific to autistic talk-in-interaction and writing and then seek to identify any commonality between the tentative features of autistic talk-in-interaction and writing.

Before commencing any analysis work I divided the 28 articles I had identified for review (items in the reference list marked with an asterisk) into categories based on a reading of the titles. This resulted in 12 categories to begin with although it was expected that the final number would be significantly fewer in number as categories were combined as the analysis proceeded. An issue that immediately arose in consideration of the first paper was when it would be appropriate to combine categories; a reading of this paper suggesting that the ‘formulas’ and ‘echoing’ categories should be combined given that formulaicity and echolalia in autistic language are related⁸⁹ (Dobbinson et al., 2003). I decided to combine these two categories straight away but (of course) ensuring that my records could be unbundled later on should their integration subsequently prove inappropriate.

These 28 items for review are the only ones I have been able to identify that include SSJ-type *autistic CA* involving (with a couple of exceptions explained earlier) either child/adult or child/child interaction, except for an extensive additional transcription of autistic CA in the Masters degree thesis by Catherine Geils subsequently written up for a peer-reviewed journal (review item 9). Table 1 is a tabular summary of the articles reviewed listing the year of

⁸⁹ Prizant argues that both echolalia and *pronominal reversal* are a consequence of a tendency of autistic people to produce formulaic language. His proposal is that a gestalt (holistic) mode of cognitive processing in autism leads to a gestalt style of acquiring language – whereby language is learned in chunks (rather than being a combination of smaller units) – that is ‘the primary means by which autistic persons approach the language acquisition process’ (Prizant, 1983, p. 301). I shall refer to this again in the relevant sections.

publication; whether the study involved adults, adolescents, or children; the number of participants in the study; the level of intellectual functioning of the participants; together with the number of lines of both SSJ-type and non-SSJ CA included in the paper. Not all of the articles proved directly relevant to the primary subject of this thesis – language methods in autism; whilst all the articles reviewed have been written up I have only included details in this chapter of those articles that I felt contributed significantly to the subject matter.

Table 1 – Summary of Review Items

	Year of publication	Adults, adolescents or children?*	Number of participants	Functioning level (IQ)	Lines of SSJ-type CA	Non-SSJ CA
1	2003	adult	2	70	25	
2	1998	adult	1	66	141	
3	2002	adolescent	38	range	0	
4	1999	child	1	low	235	
5	2005	adolescent	1	low	6	
6	1999	child	1	low	113	
7	2007	child	46	high	0	45
8	2004	lit review	N/A	N/A	187	
9	2008/2003 **	child	1	low	96/774	
10	2007	adolescent	1	low	52	
11	2004	child/adolescent	16	range	184	
12	2007	child	1	low	235	
13	2008	child/adolescent	16	range	0	27
14	2006	child	2	low	39	
15	2010	child	1	high	198	
16	2010	child	2	high	90	
17	2003	child	3	range	74	
18	2009	child	1	NK	0	13
19	2009	child	1	NK	67	
20	2010	child	1	NK	163	
21	2003	child	1	high	141	
22	2010	adolescent	1	low	41	
23	2009	child	5	high	38	
24	2008	child	1	low	13	
25	2004	child	6	high	193	
26	2005	child	2	NK	202	24
27	2004	child	16	high	84	
28	in press	child	2	high	153	
			170		3,448	109

* Children up to age 13, adolescents from 13 to 18, adults above age 18.

** Research for a Masters thesis was subsequently written up for a peer-reviewed journal. 96 of the 774 lines of CA in the thesis were included in the article.

The 28 articles were published between 1998 and 2010 (with one in press at the time of writing; September 2011). 19 articles out of the 28 (68%) concerned studies of children; 6 of the articles (21%) involved either adolescents alone or both children and adolescents; and *only 2 studies (7%) were of adults*; the remaining article being a literature review. Of the overall total of 170 participants only three (1.7%) were adults. The majority of the studies were either of high-functioning individuals (9 studies / 80 participants / 47%) or involved a range of functioning from low to high (4 studies / 73 participants / 43%) with 7% (12) of the studies focusing on low functioning individuals and four studies (the remaining five participants / 2.9%) not giving details of functioning level. There were 14 single person case studies of which only one involved an adult. Both adult studies involved low functioning participants i.e., *I could find no study of high-functioning adults*. A total of 3,448 lines of SSJ-type CA data were included in the reports of the various studies together with a further 109 lines of non-SSJ CA (either a simpler version or with additional details added). Of the 3,448 lines of SSJ CA, *166 (5%) of the lines were of adult talk-in-interaction* and, of course, as no high-functioning adults were the subject of any research *no lines of high-functioning adult CA were available for analysis*. In other words, there is no possibility whatsoever on the basis of the extant autistic *adult* CA corpus of any meaningful meta-analysis. This is extremely disappointing to someone who has a specific interest in the language methods of high-functioning autistic adults.⁹⁰ The only way to complete the project in the truest sense would be to undertake CA-based research of high-functioning autistic adults; I hope that researchers will take up this particular cudgel because if they do not it will be difficult to understand how the developmental difficulties autistic children have experienced when growing up manifest themselves when the children become adults. And it is essential for longitudinal studies of autistic adults to be undertaken given that the process of development

⁹⁰ The one and only reason for my particular interest in high-functioning adults in this context is my belief that with high-functioning individuals the researcher can study a 'purer' form of autism without any of the complexities faced when researching persons with both autism and intellectual learning disabilities.

continues throughout the autistic adult's life in the sense that the addition of new coping strategies, their growing maturity, and the continuing support of peers, may lead to a gradual reduction in the manifestation of their autistic symptoms over time.

The interactional significance of formulas in autistic language

A paper on the subject of formulaicity in autistic language by Dobbinson, Perkins, and Boucher published in the UK in 2003. Six adult participants diagnosed with autism spectrum disorders were involved although only two of the participants were reported on. The full scale IQs⁹¹ of those reported on were 65 and 76. SSJ CA fragments totalled 25 lines. The authors have followed the Wray and Perkins definition of the concept of formulaicity:

a sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be, *prefabricated*: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar.

(Wray and Perkins, 2000, p. 1, my italics)

The authors review prosodic formulaicity (discourse avoiders); voice quality in relation to obsessive topic; lexical formulaicity with a discourse significance (yeah/yes, minimal response, turn-taker, confirmer, and part of responding/confirming utterance); and cross conversational formulaicity by reference to small scraps of CA transcriptions from two of six participants (although they state that formulaicity was demonstrated by all six). Their conclusions are interesting, particularly the suggestion of a '*continuum of productivity-formulaicity* rather than a repertoire in which items are either distinctly formulaic or available for productive usage' (ibid., p. 305, my italics). The authors suggest that an initial mention of a topic is likely to heavily influence any subsequent reference to that topic 'syntactically, lexically and at the level of discourse' (ibid., p. 305). In conclusion Dobbinson et al. put

⁹¹ Participants' intellectual functioning was measured using Wechsler's IQ rating scales. As neither of the two participants reported on had a full scale IQ score of more than 76 their autism has to be seen in the context of low intellectual functioning which complicates the determination of linguistic feature causation.

forward a view that autistic formulaicity may be *social* in nature rather than linguistic, and that the difference between autistic formulaicity and NT formulaicity may be more a matter of its *extent* in autism than of its nature.

Structural patterns in conversations with a woman who has autism

A paper by Dobbinson, Perkins, and Boucher on conversational style in autism published in the UK in 1998. There was one adult participant (aged 28 years) diagnosed with autism and with a full scale IQ of 66. 141 lines of SSJ CA were included. The authors attempt to highlight various 'differences in conversational style' (Dobbinson et al., 1998, p. 113) between a researcher and an autistic woman, suggesting that 'many of the features of the subject's talk which result in an overly repetitive style may be cognitively motivated' (ibid., p. 113). One wonders though why there would *not* be a distinctly different conversational style between a high-functioning academic researcher engaged in research with a low-functioning autistic person with a 'full scale IQ of 66' (ibid., p. 114). There are some interesting suggestions in this paper, however, as its title makes clear, only one participant.

The authors write of CA '(enabling) one to move beyond a perspective in which the language used by those with autism is regarded as merely deficient' (ibid., p. 115), and of a 'shift in emphasis away from the person with autism as the source of trouble in talk, and re-focus on the interaction itself' (ibid., p. 128) which is to be applauded. However, are 'deficiencies' in the participant's talk due to her autism, the fact that it is not naturalistic talk-in-interaction, due to cognitive demand on a low-functioning person, or to some other variable?

The authors make some very interesting points that will be the subject of comment later on:

- Circularity - The participant's conversation 'seems to focus not only on what is to come but what has already taken place [e.g., repairing or completing previous talk,

NCJ]’ (ibid., p. 128) and she ‘relies heavily on what has come before in structuring her present talk’ (ibid., p. 128);

- Repetition – Although, immediately after writing that the participant ‘shows a tendency to repeat syntactic constructions and lexical items’, the authors state that this is ‘a feature of normal spoken language’ (ibid., p. 128), they later conclude that ‘these data suggest that the phenomenon of linguistic repetitiveness in autism is not confined to the production of echolalic utterances, but is also an important feature underlying much of the conversational material examined above’ (ibid., p. 129).

Echolalia (with a particular focus on delayed echoing)

Although Dobbinson, Perkins and Boucher consider that linguistic repetitiveness in autism is not limited to echolalia, they point out that repetitiveness ‘has been most often examined in the context of echolalia’ (Dobbinson, Perkins and Boucher, 1998, p. 128). An article by Tarplee and Barrow on the subject of delayed echolalia⁹², containing SSJ CA, was published in the UK in 1999. Their study involved one male child participant aged 3 years and 5 months and diagnosed as being ‘on the autistic spectrum’. No mention of the child’s IQ is made although his developmental age level on the Merrill Palmer Scale of Mental Tests was 2 years and his Vineland Adaptive Behavioural Scales developmental age levels varied between 1 year 3 months and 2 years 4 months. 235 lines of SSJ CA were included. References are made to the article by Wootton (1999) that I shall report on shortly.

On first glance, this paper of over 30 pages in length with 235 lines of CA transcription concerning delayed echoing in one child might appear to confirm the view held in some quarters that CA is often of a trivial nature. However, this would be a false view in that the

⁹² There are various types of echolalia: *immediate echolalia* involves repetition of words that have just been spoken, *delayed echolalia* is repetition of words spoken after a lapse of time, echolalia involving repetition of a previous turn-taker’s talk is *prior-turn echolalia*, and repetition of words used by the speaker is *palilalia*.

extremely thorough and detailed analysis has demonstrated that the echolalia has communicative intent and is used as a resource by both the child and his mother.

the child's echoes serve him in important ways as a resource for engaging in reciprocal talk with his mother (and) are a resource which is also drawn upon by the child's mother, to particular interactional ends. Delayed echoes, for this dyad, have an important part to play in the construction of intersubjectivity. (Tarplee and Barrow, 1999, p. 449)

In concluding, in response to their own question 'What interactional work might the delayed echoes produced in this child's interactions accomplish?' (ibid., p. 451), that the child's echoing enables him to 'initiate social interaction with his mother' (ibid., p. 478), to achieve 'extended sequences of reciprocal talk' (ibid., p. 478) with his mother, to seek responses and attempt to get his mother to repair previous turns at talk, the authors challenged the then received opinion that echolalia in autism carried no meaning or intention.

I can do no better than finish my summary of this article with the authors' final sentences:

It would seem that (this child's) echoing creates a place which is somewhere mid-way between the non-interactive world which (he) sometimes enters, and the fully interactive world inhabited by his mother. In that half-way world, perhaps, mother and child are able to meet. (ibid., p. 481)

The next paper on echolalia with SSJ CA that I reviewed – by Wootton – also concerned the delayed version and was published in the UK in 1999. This study involved one male child participant aged 11 years and 4 months. He was said to have scored 50.5 on the Childhood Autism Rating Scale (CARS) which we are told is indicative of 'severe autism' (Wootton, 1999, p. 362). There is no direct reference to the child's intellectual functioning although the author refers to him being 'with other children with severe learning difficulties' (ibid., p. 361)

and mentions a developmental age of between 2 and 2½. CA fragments totalling 113 lines were included. Various references are made to the Tarplee and Barrow article.

Whilst Tarplee and Barrow (1999) sought to challenge the then received opinion that echolalia in autism carried no meaning or intention by concluding that a child's echoing can be interactional in nature, in that it enabled the child to 'initiate social interaction with his mother' (Tarplee and Barrow, 1999, p. 478), and achieve 'extended sequences of reciprocal talk' (ibid., p. 478) with her, conversely, Wootton is interested in non-communicative echoing; specifically, how a child with autism appears to distinguish between its interactional talk and its non-interactional (non-communicative) echoing (Wootton, 1999).

Through some very detailed CA Wootton concludes that his child participant differentiated his talk-in-interaction from non-communicative echoing in three ways i.e., incomplete echoes (echoes that tail off), echo repetition, and so-called 'innovative renderings' by which he means unusual prosody⁹³ (Wootton, 1999). The author suggests that the child synchronises his echoing with his talk-in-interaction, e.g. by echoing at particular points in his involvement with another person where closure is possible, and thus has to be attentive to the talk of the other person (Wootton, 1999). An analogy is drawn between 'the occurrence of repetition, deletion [incomplete echoes, NC] and innovation in the design of his echoes' and 'the bedtime soliloquies of normal children' (ibid., p. 377). Wootton concludes as follows:

The corollary of these observations seems to be that the child with autism ... (has) to manage and co-ordinate two worlds of involvement, one at the interface with other people, the other focusing around those concerns which are articulated through his delayed echoes ... For the most part, the separation

⁹³ Interestingly, Wootton refers to a '*creaky* vibration of the vocal chords' (Wootton, 1999, p. 369, my italics) that has echoes of Damico and Nelson's description of the child in their study making a 'high piercing sound said to be like a creaking door' which they referred to as a "*vocal creak*" (Damico and Nelson, 2005).

of these two worlds⁹⁴ is a predominant feature of his way of managing them.
(*ibid.*, p. 380)

A further paper on echolalia was published by Stribling et al. in the UK in 2007. This study involved one female child aged 16 years diagnosed with ‘an ASD and severe learning difficulties’ (Stribling et al., 2007, p. 431). 52 lines of SSJ CA were included (excluding repeats⁹⁵). References are made to the Tarplee and Barrow and Wootton articles.

Stribling et al. investigated two forms of echolalia consisting of a form of immediate echolalia involving repetition of the final word of a previous turn-taker’s talk (prior-turn repeats) and what the authors suggest may be a form of palilalia involving repeats of words used by the speaker. They hypothesise that both these forms of echolalia may ‘constitute an adaptation to interacting with a limited lexicon’ (Stribling et al., 2007, p. 428) and hence that ‘The activities considered ... suggest that (the participant child) may possess a level of pragmatic competence over and above what might be expected from the level of lexical and syntactic skills she displays’ (*ibid.*, p. 442). It is proposed that prior-turn repeats may be used by the child to show she is aware that talk has been addressed to her and that she is required to respond but, lacking vocabulary and the means to construct a typical response, she uses this form of echolalia instead. A further suggestion is that palilalia involving within-turn repeats of her own words ensures that she is heard as if she only says the response word once it may get ‘lost’ if there is a speech overlap. Another proposal is that repetition may occur as a means of the child retaining her turn at talk whilst she undertakes some action, described by

⁹⁴ Tarplee and Barrow (1999) refer to an autistic child being in a ‘half-way world’ (between non-interaction and full interaction) – which implies being half-way between two worlds – and here is Wootton writing of another autistic child inhabiting two worlds (full interaction and the world of delayed echoes). Perhaps with a better understanding of echoing it will be possible for children and their carers to exist in the same world?

⁹⁵ One fragment was repeated on the same page of the article: is this immediate written echolalia?!

Stribling et al., as ‘sustaining talk whilst the responsive action is underway’ (ibid., p. 442) with each repetition coinciding with a separate action by the child.

The Stribling et al. study is an interesting application of CA to echolalia in autism although a further question to ask is whether such examples of repetition in talk might not be a reflection of the ‘severe learning difficulties’ (ibid., p. 431) of the child rather than of her autism, particularly bearing in mind the authors’ contention that ‘repetition practices may constitute an adaptation to interacting with a *limited lexicon*’ (ibid., p. 428, my italics).

The article concludes with a statement of the importance of ‘examining concurrent non-vocal activity in understanding the talk of speakers with an ASD’ (ibid., p. 443). I agree with them and make a plea for CA transcriptions to make such activity as clear as possible.

Autism and the social world: an anthropological perspective

This ground-breaking review of previous work on the evaluation of autistic talk-in-interaction paper by Ochs et al. published in the USA in 2004 considers autism from a *socio-cultural* domain since autistic people are members of social groups as well as being individuals (Ochs et al., 2004). The main body text incorporated 182 lines of SSJ CA with 5 further lines in a notes section. References are made to the Dobbins et al. article.

To make their study a manageable task, the authors focus on socio-cultural perspective-taking in relation to autism – which they refer to as socio-cultural decentring – to complement the extensive work already undertaken on perspective-taking from an interpersonal perspective regarding the understanding of mental states e.g. the theory of mind concept (ibid.). In adopting a conversation analytic methodology, and following Sacks, they consider that the

concept of recipient design in CA assists in ‘bridging interpersonal and socio-cultural dimensions of social functioning’ (ibid., pp. 156-7). Ochs et al. see social functioning as a ‘real-time *process* involving knowledge of historically rooted and culturally organized social practices’ (ibid., p. 157, my italics) as well as an aspect of *ability*.

Ochs et al. consider that three features of socio-cultural perspective-taking (understanding practices, identities and institutions) make it less demanding for autistic people⁹⁶ than interpersonal perspective-taking (understanding another person’s wants, desires etc.):

First, certain socio-culturally preferred and expected mental dispositions associated with practices, identities and institutions are *accessible to explicit socializing discourse* ... Second, the link between preferred and expected mental states and certain social practices, identities, and institutions may be relatively *stable* and *predictable* ... Third, the interpretation of socio-culturally durable intentions, beliefs, knowledge, and feelings is facilitated by the fact that practices, identities, and institutions that are systematically linked to these dispositions are themselves recognizable through an *array* of co-occurring perceptual cues. (ibid., p. 158, authors’ italics)

The authors write that their research indicates that there is a continuum in the ability of autistic people to take a socio-cultural perspective ranging from the least challenging – turn-taking in conversation – through the middle ground of interpreting situational scenarios to the most challenging aspect – the inferring of social meaning indexed by, for example, people’s talk or behaviour. They identify four features of socio-cultural indexicality ‘that pose interpretive challenges’ (ibid., p. 167) for people with autism⁹⁷ i.e., initial identification of indexicals is difficult in itself; indexicals have more than one possible interpretation, so a choice has to be made between ‘competing’ interpretations; the identification of indexicals and choosing between differing meanings often has to be done quickly and in situations where the matters being talked about also change quickly; and the interpretation of socio-

⁹⁶ Although Ochs et al. refer specifically to *autistic* people in relation to the enabling properties of socio-cultural perspective-taking these properties, presumably, apply to *all* people, not just people with autism.

⁹⁷ As with the features that make socio-cultural perspective-taking less demanding for autistic people, the features that make it more challenging are, presumably, equally applicable to those without autism.

cultural indexicals requires '*part-whole inferencing*⁹⁸', which appears to be impaired in those with autism spectrum disorders' (ibid., p. 168, authors' italics).

I commend the SSJ CA fragments in the Ochs et al. article as excellent examples of the power of this technique to determine what is actually going on in talk-in-interaction to a greater extent than other methods. Two of the most impressive pieces of analysis are included at Appendix B. In the first fragment of CA 'Don' is only able to infer the socio-cultural meaning of a particular speech act – in its context – after his mother breaks the situation down into its constituent parts for him. The second fragment demonstrates that 'Adam' is unable to correctly understand a particular indexical link made by his parents.

A conversation analysis of interactions with a child with autism

A paper by Geils and Knoetze published in South Africa in 2008. The study involved one male child aged 6 years and 6 months diagnosed with a Pervasive Developmental Disorder. No mention of the child's intellectual functioning is made although, from the CA fragments, it is clear that he was intellectually at a higher level than many of the other children featured in the papers reviewed so far. 96 lines of SSJ CA were included. References are made in this article to the Dobbinson et al., and Tarplee and Barrow articles.

This article begins with an account of how a social constructionist perspective '(raises) important issues as to the *doing of life itself* for those with (the communication difficulties associated with autism)' (Geils and Knoetze, 2008, p. 203, authors' italics). The authors write that a social constructionist approach 'represents a shift away from locating the

⁹⁸ The point about part-whole inferencing is a reference to the weak central coherence account of autism. A preference for detail over holistic understandings is now considered a cognitive style in autism rather than an impairment; indeed Ochs et al. mention that the children in their study had no difficulty with part-whole inferencing in relation to the situational scenarios developed for their study (Ochs et al., 2004).

problems (and solutions) solely in the communication *of* the child with autism' (ibid., p. 204, authors' italics), and that CA '(aims) to identify the methods and procedures ... participants employ to make sense of ... interaction and be understood by each other' (ibid., p. 204). (This article chimes almost exactly with my own approach.) They also stress the value of SSJ CA for analysing the limited discourse of a child with autism (ibid.).

The authors' interest arises from their having set up and managed an intervention programme for a child diagnosed with a Pervasive Developmental Disorder. They therefore regarded it as important to understand the different interactive styles of the adults involved in the child's day-to-day care which included his parents, sister, and a volunteer helper. Their interactive styles are assessed as being somewhere on a continuum involving elements of *co-ordinated interaction* – which encourages the child to talk and otherwise participate – and elements of *discordant interaction* – which discourages the child's participation. Geils and Knoetze also report on interactive strategies used by the participants, suggest strategies for developing co-ordinated interaction, and highlight discordant interactive practices to be avoided.

As regards the various interaction styles of the child's co-participants, and the consequences each style has for the effectiveness⁹⁹ of interactions, the authors write, following Wetherby, Schuler and Prizant, 'of the need to consider not only the communicative behavior of the child with autism but also the communicative behavior of his or her co-participant' (Geils and Knoetze, 2008, p. 201; Wetherby, Schuler and Prizant, 1997) so that, following Wetherby, 'the person with autism ... is no longer regarded as the sole source of difficulty' (Geils and Knoetze, 2008, p. 201; Wetherby, 1986) when interacting with others.

⁹⁹ Geils and Knoetze describe effective interaction as 'synchronous' and ineffective interaction as 'discordant'.

The CA transcripts included in the thesis did not add significantly to the findings of my review of the fragments in the article, however, I was intrigued by some instances of what appears ‘out of place’ language used by the child in instances of transcribed talk-in-interaction included in the thesis but omitted from the article.¹⁰⁰

Discovering communicative competencies in a non-speaking child with autism

A paper by Stiegler published in the USA in 2007 reporting on a single case study of communication by a non-speaking autistic boy aged 8 years 7 months. The child communicated using ‘contact gestures, vocalizations, minimal gaze, and a few inconsistent approximations of words and manual signs’ (Stiegler, 2007, p. 403). At age 5 years 3 months he was said to use receptive language in the 8–11 month range and expressive language in the 12–16 month range. He was described as severely autistic in accordance with the Childhood Autism Rating Scale. The appendix contains a 235 line sequence of SSJ CA (from which sections are extracted to make points in the main body text). This is by far the longest, continuous piece of CA I have discovered *recording non-verbal communication*.

This paper on the discovery of communicative competencies in a non-speaking child with autism was intended by the author to demonstrate the effectiveness of an adapted form of CA, supplemented with speech act analysis, to support the work of speech-language pathologists in both investigating the communicative abilities of their clients and in evaluating the effects – both positive and negative – of their own communicative style as clinicians.

¹⁰⁰ I have emailed the lead author of the Geils and Knoetze article to discuss the instances of the child’s talk referred to. These are instances where the child used a form of words that appears entirely unrelated to the particular interaction transcribed. I would like to know whether the authors understand the source of any of these apparently inexplicable utterances. For example, in Sequence A in Appendix 2 of Geils’ thesis the child sings ‘splish splash I was having a bath’ (Geils, 2003, p. 107) whilst playing a game of catch with his father.

The study is said to have revealed a number of communicative abilities in the child that might not have been apparent without the use of CA (and speech act analysis) ‘including an awareness of conversational structure and sequence, diversity of communicative acts, functional use of gaze and smile behavior, and the ability to spontaneously initiate interactions’ (Stiegler, 2007, p. 400).

Language, autism, and childhood: An ethnographic perspective

A US paper by Solomon published in 2008 and reporting on a number of studies undertaken as elements of a larger ethnographic socialisation project on communication in children with severe autism. A cohort of 16 children and adolescents aged between 3 years and 18 years was involved. 27 lines of a simpler, non-SSJ form of CA are included. This paper is more philosophical than empirical *making some interesting points about habitus, language-games and other sociological concepts* that are referred to elsewhere in this thesis.

Solomon’s article reviews the following nine previous studies undertaken as elements of the ethnographic project on communication in children with severe autism (see table 2 below).

Table 2 - University of California, Los Angeles Ethnography of Autism Project articles

Year	Authors	Title
2002	Ochs	Becoming a speaker of culture
2004	<i>Ochs, Kremer-Sadlik, Sirota and Solomon</i>	<i>Autism and the social world: an anthropological perspective</i>
2004	Ochs and Solomon	Practical logic and autism
2004	<i>Kremer-Sadlik</i>	<i>How Children with Autism and Asperger Syndrome Respond to Questions: a ‘Naturalistic’ Theory of Mind Task</i>
2004	<i>Sirota</i>	<i>Positive politeness as discourse process: politeness practices of high-functioning children with autism and Asperger Syndrome</i>
2004	Solomon	Narrative introductions: discourse competence of children with autistic spectrum disorders
2004	<i>Sterponi</i>	<i>Construction of Rules, Accountability and Moral Identity by High-Functioning Children with Autism</i>
2005	Ochs, Solomon and	Limitations and transformations of habitus in Child-

	Sterponi	Directed Communication
2005	Kremer-Sadlik	To be or not to be bilingual: Autistic children from multilingual families.

N.B. Articles in italics are those I had identified as relevant to this thesis prior to reading Solomon's article.

I had already identified four of these articles reviewed by Solomon as including SSJ CA and hence requiring to be reviewed as part of my project. I decided to consider the other five papers reviewed by Solomon when attempting my overview of all the articles reviewed as part of this project. But, as the Bourdieuan concept of the habitus required discussion in connection with my thoughts on the development of a linguistic basis for an understanding of autism, and because *the habitus cannot be a language method in its own right*¹⁰¹, I have already discussed Solomon's comments on habitus in the relevant section of Chapter III.

The design, delivery, and placement of delayed echolalic utterances by a child with an autistic spectrum disorder

A paper by Stribling et al. published in the UK in 2006 and reporting on an aspect of a project to develop therapeutic applications for mobile interactive robot platforms. (Whilst I made the decision not to consider child-robot interaction in my project focused on talk-in-interaction¹⁰², this particular paper includes transcribed autistic talk-in-interaction hence its inclusion in my review.) The two child participants were both diagnosed with an autistic spectrum disorder together with special learning needs. The children were within the primary school (5-11) age range (their exact ages were not mentioned). 39 lines of SSJ CA were included.

¹⁰¹ Habitus cannot be a specific *feature* of either talk-in-interaction or of writing (whether autistic or otherwise); hence, the concept of habitus in autism is not discussed in the chapters on autistic talk and autistic writing.

¹⁰² Perhaps I should have said right from the start that I meant talk-in-interaction with human beings!

The authors undertake a review of the literature on echolalia in autism and then analysed three utterances of what they described as the ‘possibly echolalic’ (Stribling et al., 2005/6, p. 3) talk of one boy with an autism spectrum disorder and complex special needs. I want to use my appendix comment on ‘Extract 1’ from this article to, again, make the point that talk-in-interaction requires extremely careful analysis. Although elsewhere they include the qualifier “possibly” in their discussion, in this article they state, unequivocally, that this extract is an example of delayed echolalia. I do not agree and provide my reasoning alongside the authors’ extract at Appendix C to enable readers of this thesis to form their own view.

Intersubjectivity and progressivity in the communication of a child with autism

A 2010 article by Sterponi and Fasulo (one author based in the USA, the other in the UK) reporting on a case study of an autistic child aged 5 years 10 months ‘(engaged) in habitual and spontaneously occurring activities in the home’ (Sterponi and Fasulo, 2010, p.119). The child had not taken an IQ test but the authors write that ‘he was capable to read (sic), write, and do arithmetic at a level comparable if not higher than that of normally developing children of his age’ (ibid., p. 120). 198 lines of SSJ CA were included (including repeats).

It is my strongly held opinion that Sterponi and Fasulo’s article, and the study on which it is based, are exemplars of what can be achieved with CA in the field of autistic language methods. This is typical ethnomethodological research in the sense that they have adopted the case study approach to, in the authors’ own words, to ‘maximize analytic depth and detail’ (Sterponi and Fasulo, 2010, p. 120), however, unlike many, if not most, other CA studies of autism, this is real in-depth investigation. The authors develop a theory, grounded in the CA data, to explain the case study child’s constant use of a particular phrase (“or else?”); my literature review has not uncovered any other instance of a study that does this. Because the development of theory is so unusual it is well worth quoting – together with a

fragment of conversation as an example at Appendix D – to demonstrate what in-depth analysis of a relatively small number of talk-in-interaction fragments can achieve. The authors' investigation of the child's repertoire of progressivity techniques showed that he used appendor questions very regularly, 'namely prepositional phrases and adverbial clauses syntactically affixed to the immediately preceding sentence' (ibid., p. 121) including the "or else?" question considered above that is almost the child's "catch phrase". They write that:

Insofar as they are produced where behavioral compliance is expected, (the child's) *progressivity moves are incisive, recontextualizing actions*: under the strictures of a normative sequence, neither full compliance nor unambiguous rejection is produced. (The child) wedges himself into a liminal position, suspending the behavioral demands and *launching a new language game*¹⁰³. (ibid., p. 124)

Interestingly to me, as it is one of my aims to try and compare autistic language in its naturally occurring talk-in-interaction and narrative forms, Sterponi and Fasulo compare the child's use of "or else?" to place himself in a liminal position (neither complying with a directive or exhortative nor refusing to comply), with Bartleby's acclaimed "I would prefer not to" formula from Melville's novel *Bartleby the Scrivener*¹⁰⁴ (ibid.).

Sterponi and Fasulo suggest that the child's progressivity techniques – such as the use of "or else?" – enable him to achieve an element of control over conversation, however limited that control may be. It can be conjectured that Bartleby was also exercising some control. They also point out that directives and exhortatives are not usually seen by participants in talk-in-interaction as a means of maintaining or developing a conversation, however, in this child's case they are used to progress talk, Sterponi and Fasulo writing that 'directives' indexical

¹⁰³ It was this reference to language games in Sterponi and Fasulo (2010) together with another reference in an article by Sterponi (2004) that led me to Wittgenstein's work. I am ever so grateful to them for this.

¹⁰⁴ In Melville's novel *Bartleby* takes up residence in his place of work – legal chambers – and no amount of persuasion or other tactics can get him to leave. Every time the subject of leaving the offices is broached, or he is asked to say something about his life before he started working at the law offices or about himself, or, after a while, when he is asked to undertake some work for his employer, he replies 'I would prefer not to' or 'At present I prefer to give no answer' (Melville, 2010, p. 35). I refer to this book in the next chapter.

character (make) them propitious anchors for progressivity moves' (ibid., p. 129) and are, perhaps counter-intuitively, 'more empowering than limiting' for the child (ibid., p. 130).

Although the child rarely initiates conversation, and very often reuses words spoken to him by others, he does on occasion make his own 'autonomous contribution' (ibid., p. 136), some being quite novel, if idiosyncratic, and capable of 'steering the interlocutor into warranting him the right and obligation to (make his own contribution)' (ibid., p. 136).

Prosody as an interactional resource: A clinical linguistic perspective

A paper on prosody by Wells and Local published in the UK in 2009 which introduces a new, integrated form of CA transcription combining SSJ-type analysis with Crystal's approach to profiling and transcribing prosodic features of conversation (Crystal, 1987; 1992) and a 'traffic light' system to indicate whether a child uses prosodic features in a systematic way to regulate turn-taking in their conversation (the authors having drawn attention to the function of prosody to control the exchange of turns at talk in the English language) (Wells and Local, 2009). Two fragments (totalling 13 lines) of conversation involving an 11 year old autistic child are used to illustrate their approach to transcription. I have included an example of Wootton's integration of SSJ CA with Crystal prosody profiling at Appendix E.

An article by Wells, Corrin and Local concerning their study of prosody in children was published in the UK in 2008. This study involved 3 children; one typically developing (TD) aged 1:07 – 1:09, one with expressive speech and language difficulties aged 5:04, and one described as having severe autism aged 11:04. 50 lines of SSJ CA are included; 22 for the TD child, 15 relating to the child with language difficulties, and 13 for the autistic child.

Wells, Corrin and Local write that language acquisition research into the development of a child's ability to master prosody has been neglected and that the mastery of prosody in atypical children has been the subject of even greater neglect. Their paper seeks to understand the prosodic differences between typically developing children, children with expressive speech and language difficulties, and autistic children.

The authors summarise their analysis of the autistic child's prosody by writing that he 'appears able to respond to his co-participant's use of prosodic resources to project turn endings. He himself routinely uses a pitch fall to signal turn-completion. There is some evidence that he is able to produce well-formed intonation contours, particularly in his echoes. However, this ability is less evident in initiations, suggesting a sequential constraint on his ability to deploy prosodic features for interactional purposes' (ibid., p. 149) in comparison to the TD child and the child with speech and language difficulties.

Inflexibility as an interactional phenomenon: Using Conversation Analysis to re-examine a symptom of autism

A paper on conversational inflexibility in autism by Muskett et al. published in the UK in 2010 in which one child aged 8 years 9 months was involved. The authors verified an earlier diagnosis using the Childhood Autism Rating Scale on which the child's score was 34 'indicating a "mild-to-moderate" level of ASD' (Muskett et al., 2010, p. 4). The child's level of intellectual functioning is unknown. Nine fragments of talk total 163 lines of SSJ CA.

This paper by Muskett et al. points out that current theories of autism causation come in one of two categories, either direct causation theories whereby atypical behavior is regarded as being a direct result of underlying neurobiology or cognition, or indirect theories which treat atypical behaviour as indirect compensatory adaptations reflecting underlying neurobiology

or cognition but not a direct consequence of it (Muskett et al., 2010). The authors focus their study on what they regard as two interconnected epistemological assumptions of the direct causation model, namely: (a) how a specific behavior is identified as being a symptom of autism given that the same behavior may be regarded as quite normal under different circumstances; and (b) that symptomatic behaviours of autism can be studied independently of the circumstances in which they occur. The article concerns the impact of context on the investigation and determination of inflexibility. They argue that their analysis suggests that the child they study only '*appears to behave inflexibly*' (ibid., p. 3, my italics).

The authors write that the child's apparently inflexible behaviour in attempting to prevent the researcher from initiating new turns-at-talk (through regularly asking "do you know what?" – referred to as a DYKW question – after the researcher tries to change topic) 'is the product of the child's strategic attempts to retain control over the unfolding interaction, within a context where such attempts breach normative expectations about adult-child play' (ibid., p. 1) which 'challenges the assumption that ASD's behavioural profile solely represents the endpoint of underlying deficit' (ibid., p. 1)¹⁰⁵. They also show that the child's 'inflexibility' is assisted by the researcher who, unintentionally, hands back control of the conversation to the child after the DYKW questions by responding "what?" on each occasion the question is put.

Muskett et al. conclude their article by stating their concern that direct causation models of autism symptoms fail to take account of 'the contingent, dynamic, and emergent product of (the child's) behavior, the behavior of co-speakers, the interpretation of her behavior by co-speakers, the local context in which this occurs, and the normative expectations that are

¹⁰⁵ Muskett et al.'s view that the use of strategies such as "do you know what?" questions by autistic children challenges the deficit perspective of autism is supported by Forrester's comment that 'the common observation that often children, who as participants do not necessarily have full speak-at-any-time membership rights, often employ phrases such as "do you know what, Mummy?", thus initiating the requisite response from the adult, "What?", and guaranteeing the floor in their next turn' (Forrester, 2010, p. 47).

associated with that context' (ibid., p. 14), advocating the use of SSJ CA to 'unpick these highly complex and multifactorial issues' (ibid., p. 14).

Managing interaction

An article by Rendle-Short published in Australia in 2003 and reporting on a single case study of an 8 year old child with AS. An entire telephone conversation between the AS child, a friend of hers, and the friend's mother is transcribed totalling 141 lines of SSJ CA. One page of the article – with some of the CA – was missing from the online version; however, on request, the author kindly provided me with a full copy of her paper including the previously missing page.

In my opinion, this case study is an example of what autism research should look like in the sense that it attempts a truly in-depth case study of a significantly long single piece of talk-in-interaction (a telephone conversation) under naturalistic circumstances. Although, even here, improvements can be identified, I do not want to focus on these since the study is the one and only occasion where a lengthy piece of talk-in-interaction I have discovered uses CA to, as the author writes, 'show what it is that AS children are actually doing as they talk, by analyzing what actually occurs when one AS child talks to ... other interactants' (Rendle-Short, 2003, p. 162). Rendle-Short states that 'very little research has focused on the actual communication difficulties faced by AS children as they interact with those around them' (ibid., p. 161). That situation, unfortunately, remains true today despite the fact that nearly a decade has passed since Rendle-Short undertook the study reported on here.

The conversation involving the girl with AS, her closest friend, and the friend's mother was initiated by the child with AS (Suzy) who had missed the final day of the school term before the Easter break and wanted to know if her friend had brought her Easter egg from the

classroom for her. Analysis of the conversation suggested to the author that Suzy seemed to be aware of and understand the rules of turn-taking in conversation. However, when she is faced with what to her is 'a difficult interactional situation in which she cannot, for whatever reason, produce a SPP [second pair part, NC¹⁰⁶], she does not seem able to manage the problem or to do the necessary work to repair the situation' (ibid., p. 169). This is reminiscent of a conclusion that Wootton draws about one of the children in his study where he writes that the child concerned seems only able to respond to the change in routine by trying to get the situation to revert to normal, appearing unable to consider other tactics (Wootton, 2002/3).

As Rendle Short concludes her paper, this analysis 'points to the usefulness of fine-grained analyses such as CA as a way of teasing out the precise issues facing those with AS or other communicative difficulties. Much AS research refers in rather vague terms to communication and pragmatic difficulties, but this more detailed analysis is useful in pinpointing the nature of these difficulties' (ibid., p. 179). I could not agree more.

Both the girls involved in the conversation had been made aware that they would be recorded at some point and had consented to this. At the actual point of recording only the girl with AS and her mother (who did not take part) were aware they were actually being recorded. This is an area of the study that could have been improved upon. From what Rendle-Short writes it is clear that *the girl with AS knew she was being recorded*. This could have affected her verbal performance during the conversation. There are indications that any effect was not

¹⁰⁶ According to the principles of conversation analysis a key concept of conversation is the *adjacency pair* by which talk-in-interaction is divided into two parts e.g., a question or a greeting (referred to as the *first pair part*) will normally be followed by a response known as a *second pair part* (Goodwin and Heritage, 1990).

significant¹⁰⁷ but it would perhaps have been better practice for the recording to have taken place long enough after consent was given for there to have been no doubt¹⁰⁸.

Studying misunderstanding and repair in adult-child interactions

An article relating to an Australian study from 2009 by Delves and Stirling that investigated misunderstanding and repair in conversations typically developing children and children with autism have with adults. The study involved 10 children; 5 typically developing and 5 high-functioning children with autism, ranging in age from 4 years to 7 years 6 months. 86 lines of SSJ CA are included; 48 for the TD children and 38 for the HFA children. The SSJ CA was integrated with Clark and Schaefer's 'grounding' technique¹⁰⁹ (Clark and Schaefer, 1989) which the authors felt broadened their interpretation of misunderstanding and repair.

The authors' article provides useful descriptions of CA, the concept of 'repair', comments on why an examination of repair in autism is of value, and a brief review of the literature on repair in autism. They also analyse examples of misunderstanding and repair from their data set, discussing 'some problems associated with the study of misunderstanding and repair' (Delves and Stirling, 2009, p. 3), specifically 'instances of misunderstanding which do not explicitly constitute repair by a CA definition' (ibid., pp. 20/1) which they believe that the grounding concept can illuminate, thus adding to the analytic lens provided by the CA.

¹⁰⁷ Rendle-Short has informed me in correspondence that the child's behaviour on that day was consistent with her usual behaviour (Rendle-Short, 2011a).

¹⁰⁸ In relation to my point about a 'gap' between obtaining informed consent and actually doing the recording, Rendle-Short writes that 'I think you may have misunderstood the process of collecting data from children. It is very important that they are part of the process so that their rights are respected. Plus the practicality of collecting data means that there has to be co-operative agreement to the process. I therefore disagree with your comments' (Rendle-Short, 2011b). I did not suggest that consent should not be obtained, simply that a delay in undertaking the research *after obtaining consent* might enable the achievement of a naturalistic setting.

¹⁰⁹ According to Clark and Schaefer conversation between a *contributor* and their *partners* can be divided into units which they call *contributions* which requires the contributor to set out their contribution and the partners to take note of it (known as *content specification*) as well as an agreement by the contributor and partners on what the contribution involves (known as *content grounding*) (Clark and Schaefer, 1989). There is some similarity between a contribution as defined by these authors and the first pair part in conversation analysis.

Whilst the concept of grounding appears to add some useful additional detail regarding misunderstandings not leading to repair (in persons with and without autism), my view is that, by definition, any misunderstanding not involving repair does not affect the ongoing interaction between the participants of a conversation. Given that it is interactional trouble that is of most interest in relation to persons with atypical development, the grounding technique would not seem to add any significant value to investigation of the difficulties in autism, indeed there is no evidence to suggest that autistic people are more prone to the kind of misunderstandings¹¹⁰ referred to by the authors than are typically developing people.

Construction of rules, accountability and moral identity in high-functioning children with autism

A US paper relating to a study by Sterponi published in 2004 and involving 6 children with high-functioning autism between 8 and 12 years of age. 193 lines of SSJ CA are included. Sterponi has investigated how high-functioning children with autism handle violations of rules and norms in social interaction – both their own violations and violations committed by others – as well as how they account for their own misconduct. I note that she follows up her statement that ‘dynamism and creativity typical of accountability practices constitute *serious challenges* for children with autism’ (Sterponi, 2004, p. 222, my italics) with a conclusion that ‘high-functioning children with autism can actively engage in discourse about norms and transgressions in an initiatory capacity, thereby *displaying mastery* and deployment of social rules as guides for appropriate conduct and as yardsticks against which their own and others’ actions are evaluated’ (ibid., p. 222, my italics). Presumably they are capable of coping with the “serious challenges” then! There appears to be an element of surprise for the

¹¹⁰ The misunderstandings referred to by Delves and Stirling in their article include examples of incomplete repairs and joint repairs (which should feature in a traditional CA analysis) and misunderstandings that have been ignored by the participants (which would not). I doubt whether misunderstandings that do not interrupt the flow of conversation can be particularly salient in the context of communication difficulty in autism.

author in these findings indeed, not only does the author appear to find an ability to master some social rules to be unexpected, but she expresses her surprise, in no uncertain terms, that *high-functioning* autistic children are even able to converse and take part in other types of interaction with others successfully, having written that the findings of the Ochs et al. study (Ochs et al., 2001) in this regard are ‘surprising findings’ (ibid., p. 208). Since Sterponi specifically refers to high-functioning children I find her surprise most surprising.

The author makes a fascinating comment about ‘Prior courses of action (constituting) for the autistic children the fundamental source for reaching an understanding of what is in the mind of other people’ (ibid., p. 223); her comment relating to the issue of ToM where she agrees with Ochs and Wootton (Ochs, 2004; Wootton, 1997) that ‘understanding others’ mental states is in part encoded in the sequential structuring of social practices’ (ibid., p. 223).

In view of my interest in Wittgenstein and his concepts of the ‘language-game’ and ‘form of life’, I found it especially noteworthy that in Sterponi’s study¹¹¹, and apparently following Buttny, she treats accountability practices as a Wittgensteinian language-game (Buttny, 1993; Sterponi, 2004). Sterponi writes that ‘(thinking) about accountability as a language game helps us to understand not only its mechanics but also how it is acquired’ (Sterponi, 2004, p. 209-210). Incidentally, I can find no other autism related research that specifically regards an aspect under review as a language-game.

In conclusion, Sterponi writes that learning the accountability language-game ‘(allows) children with autism to achieve [a, NC] more satisfactory membership position in their social world’ (ibid., p. 223) It is my view that the impact of autism on any autistic individual is

¹¹¹ Sterponi refers to her study as an “investigation” although I think she may have an ethnographic investigation in mind rather than a Wittgensteinian grammatical (linguistic) investigation.

primarily in terms of difficulty in completing an apprenticeship in the full gamut of language-games of their society and culture.

How children with autism respond to questions

A paper relating to a US study by Kremer-Sadlik published in 2004 and concerning the response to questions in naturally occurring situations at home of 16 high-functioning children with autism and AS. 84 lines of SSJ CA are included.

Kremer-Sadlik's article reports on her study of the ability of children with HFA and AS to respond to ordinary, everyday questions in naturally occurring conditions. She writes that 'contrary to findings in cognitive psychological research, the majority of the time the children were able to detect their interlocutors' communicative intentions and produce relevant responses that were marked by their conversational partners as acceptable' (Kremer-Sadlik, 2004, p. 185).

Kremer-Sadlik suggests that 'in addition to the interpersonal perspective-taking there exists a socio-cultural perspective-taking which implies that social participation entails members' ability to 'read' social situations, that is, to be aware of conventional and expected behaviors and dispositions associated with social situations and practices' (ibid., p. 195). I agree with the author and further suggest that this supports my belief that theory of mind – in general as well as in autism – is an overrated concept. I shall come back to this later on.

Conclusions

At the start of the process of reviewing the 28 articles (and one thesis) I attempted to categorise them (placing each paper in one of 12 categories), expecting that the list of

categories would change significantly by the end of the review process. Well, they certainly changed but, after completing the review, I decided to dispense with the categorisation process altogether and simply list key insights learned from the studies reported on. In a sense though this still produces a list of categories, but it is a set of potential features of autistic talk-in-interaction rather than a means of dividing up the papers into topics. The list of features gleaned from the review of the papers (in the order in which the papers were reviewed) and further papers to which the 29 led me to is as follows: *formulaicity* (Dobbinson, Perkins and Boucher, 2003); *circularity* (Dobbinson, Perkins and Boucher, 1998); *repetition* (Dobbinson, Perkins and Boucher, 1998, 2003; Stribling et al., 2007; Tarplee and Barrow, 1999; Wootton, 1999); *pragmatic difficulties*; a *dominance/silence initiation continuum*; *socio-cultural indexicality understanding continuum* (Ochs, 2004); *habitus*¹¹² of a speech community (Ochs et al., 2005 Solomon, 2008); *inflexibility with response strategies* (Muskett et al., 2010); *conversational initiation differences including initiation of conversations for a specific purpose* (Delves and Stirling, 2009; Rendle-Short, 2003; Wootton, 2002); *prosodic differences* (Adams et al., 2002; Dobbinson et al., 2003; Stribling et al., 2006; Wells and Local, 2009; Wootton, 2002); and a preference for *constructive understandings* over composite understandings (Maynard, 2005). I also noted *the importance of prior talk for autistic talk-in-interaction* as a feature (see the reference to ‘circularity’ on pages 96-97). There were also interesting contributions on the subject of *scaffolding* by conversational partners (Delves and Stirling, 2009; Sirota, 2004; Sterponi, 2004; Stribling and Rae, 2010), however, I have not reported on this subject as, although scaffolding has been identified as a feature of conversations involving autistic children, it is not a feature of their talk-in-interaction but an aspect of conversation as a process.

¹¹² The habitus is not a feature of the talk-in-interaction of autistic children but will mediate the effect of their autism on their talk.

Other key issues identified in the reviewed papers include: whether the difficulties identified in autistic talk-in-interaction have the same cause as the difficulties associated with PNT talk-in-interaction; whether features are a reflection of an intellectual learning difficulty or of autism (Stribling et al., 2007); the importance of ‘examining concurrent non-vocal activity’ (Stribling et al., 2007, p. 443) when undertaking CA; and potential links between talk-in-interaction and book form narrative.

Given the small number of studies it would be difficult to develop this list of potential features of autistic talk-in-interaction any further, however, my project was to investigate adult autistic talk-in-interaction and, of the 13 features identified, only two features were solely derived from studies of adults (i.e., formulaicity and circularity). That, of course, is not to say that features derived from studies of children are not necessarily also applicable to adults, simply that the features identified in the studies of children reported on here have not – to my knowledge – been observed in adults by researchers using CA (such features may have been, and indeed in some cases fairly obviously have been, identified by researchers using other analytical methods but my approach has been to ground features in CA).

In their review of the writing of autistic students, Brown and Klein recommend that ‘*Future research should focus on the oral language abilities of individuals with HFASD¹¹³ along with their writing and cognitive differences* to better understand how autism influences a person’s ability to write’ (Brown and Klein, 2011, p. 1473, my italics). As I am reviewing autistic talk and writing I am following a path recommended by these researchers.¹¹⁴ In the following chapter I review autistic narrative writing leaning heavily on the work of Julie Brown.

¹¹³ The acronym HFASD stands for high-functioning autism spectrum disorder.

¹¹⁴ My decision to review autistic talk-in-interaction, autistic writing, and the cognitive differences suggested by the various ‘competing’ theories of autism predated my discovery of Brown and Klein’s paper. I consider that their recommendation to study these factors together supports this aspect of my research design.

CHAPTER VI

REVIEW OF PUBLISHED AUTISTIC NARRATIVE WRITING

This is how Josef K's landlady in Kafka's 'The Castle' describes his failure to understand her:

Your ignorance of the situation you're in is so appalling that it makes my head go round to listen to you and compare your ideas with the real state of things ... You misconstrue everything, even a person's silence. You can't help it.
(Kafka, in Glastonbury, 1997, p. 61)

And this is Wittgenstein's attempt to explain to his sister why she cannot understand him:

You remind me of somebody who is looking out through a closed window and cannot explain the strange movements of a passer-by. The one indoors cannot tell what sort of storm is raging out there or grasp that the person outside might only be managing with difficulty to stay on his feet.
(Wittgenstein, in Glastonbury, 1997, p. 64)

The first stage of the research in seeking to respond to the narrative writing element of RQ 1:

“What, if any, specific features of the talk-in-interaction and *narrative writing* of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?”, with ethnomethodological principles in mind, involved the following *initial analysis* of various works by a number of authors who have either been diagnosed or retrospectively diagnosed with autism i.e., without attempting to identify specific features of autistic narrative writing at this stage of the research process. I must point out that it is not my intention to suggest that the review reported on in this chapter is anything more than an

attempt to bring together in one place a summary of the findings of earlier researchers complemented with some views of my own based on my reading of the books referred to. In Chapter VII I shall seek to identify any commonality between discovered features of autistic talk-in-interaction and autistic writing including a response to related research question (RQ 3): “Do the apparently analogous concepts of ‘recipient design (failure of)’ and ‘writer-based prose’ help to explain autistic talk-in-interaction and autistic narrative writing?”.

The diagnosis of historical figures with autism has been something of an industry for quite a while now, and one that carries a serious risk of misdiagnosis, although, as McDonagh draws our attention to, Ellmann has noted that ‘posthumous diagnosis by biographers (is) as hazardous as diagnosis by doctors when the patient is alive’ (Ellmann, in McDonagh, 2005, p. 2), which, if one agrees, provides some license for indulging in retrospective diagnosis. In any case, all the writers I make reference to have already been the subject of posthumous diagnosis by others so I feel I can share any blame coming my way with them!

Nevertheless, in an enthusiasm to identify potential research data one should be mindful of the risks associated with retrospective (posthumous) diagnosis of historical figures. To an extent, the problematical nature of such exercises is obvious; various authors over the years having identified a number of potential pitfalls for the unwary including unreliability of witnesses (which increases over time), earlier medical diagnoses (if any) probably being based on clinical examination only, lack of current author understanding of past cultural differences, the artificiality of applying modern constructs to people from earlier times, lack or inadequacy of contemporaneous case-notes, inability to obtain a personal and family medical history, and an absence of proper records of any medical examination (Jones, 1980; Monaco et al., 2009). Quite a list! Indeed, the diagnosis of famous people from past history

has been variously described as ‘one of the lowest forms of medical history’ (Baron, 1997, p. 1697)¹¹⁵ and as ‘pseudohistory’ (Adelman and Adelman, 1987, p. 278) that should only be ‘an occupational amusement’ (Seaman, 1991, p. 102). But this is not the full story.

In his critique of Fitzgerald’s retrospective diagnosis of autism in *Autism and Creativity* and *The Genesis of Artistic Creativity: Asperger’s Syndrome and the Arts*, McGrath draws attention to a number of possible failings in Fitzgerald’s methods; described as ‘reading autism’ (McGrath, 2007, p. 2, my italics) in an author from his literary works and in a fictional character from the author’s descriptions and dialogue. However, immediately after stating his intent to carry out a critical review of the two books, McGrath points out that his essay ‘considers what perspectives and methodologies of interdisciplinary literary study might add to discussions of autism and creativity’ (ibid., p. 2), thus clearly signalling a view that literary studies can add value to considerations of autism. Criticisms, apart from the obvious point that diagnosis is undertaken ‘on a purely *textual* basis’ (ibid., p. 11, author’s italics) include a suggestion that characteristics identified as autistic traits could be seen in most creative people¹¹⁶, an avoidance of environmental factors, the possibility that a seeming unawareness of social niceties may actually be an indifference to them, and an apparent discrepancy in treating both a lack of interest in nature *and* a fascination with it as evidence of autism (in different people). These are reasonable criticisms to make although McGrath may be guilty of the collection of ‘consistent examples in a routine-like, formulaic manner’ (ibid., p. 19) he accuses Fitzgerald of, and himself points out that the inconsistency in attitude towards nature is ‘valuable, for it suggests that, despite certain shared idiosyncrasies, the

¹¹⁵ Although having written in a derogatory manner about retrospective diagnosis Baron is not averse to doing it himself!

¹¹⁶ It intrigues me that after writing that some aspects Fitzgerald interprets as indications of autism can be seen in most creative people McGrath refers to the poet Auden who apparently described aspects of his early childhood as autistic, and whose father, McGrath tells us, was an early researcher of autism.

personalities of individuals with HFA/ASP¹¹⁷ may vary much like those of “neurotypicals” (ibid., p. 18). In other words, Fitzgerald is, presumably, not suggesting that people with autism have a particular attitude towards nature; but that an attitude towards nature may reflect autism. (In my opinion this element of Fitzgerald’s case is not his strongest.) As I mentioned earlier, it is, in my view, the fusion of individual pieces of ‘evidence’ that makes a case for retrospective diagnosis; but isn’t that precisely the case for *any* diagnosis, whether the person is living or dead?¹¹⁸ In the end, whilst there are no hard and fast rules for diagnosis and no guarantees of success, one can be convinced by sheer weight of evidence.

Other writers consider that retrospective diagnosis is feasible. For instance, Aaron, Phillips, and Larsen (1988) have put forward a rationale for undertaking retrospective diagnosis of developmental dyslexia in famous people from the past based on the use of biographical, cognitive, neuropsychological, and biological data. These authors contend that:

The progress made within the past few years in the areas of cognitive and neuropsychology, as well as our increased understanding of (dyslexia), makes it possible to investigate reading disability in historical individuals by applying more rigorous methods than was previously possible.
(Aaron, Phillips and Larsen, 1988, p. 523)

Although she does not justify her use of retrospective diagnosis¹¹⁹, Julie Brown has adopted a similar approach in *Writers on the Spectrum*¹²⁰ to that outlined by Aaron, Phillips and Larsen

¹¹⁷ This is McGrath’s idiosyncratic choice of ‘acronym’ for Asperger’s syndrome.

¹¹⁸ I have already referred to Ellman’s observation that ‘posthumous diagnosis by biographers (is) *as* hazardous as diagnosis by doctors when the patient is alive’ (McDonagh, in (Ed.) Osteen, 2008, p. 100, my italics). He does not say that posthumous diagnosis is *more* hazardous than diagnosing a patient in the consulting room!

¹¹⁹ It is a pity that the author did not preface *Writers on the Spectrum* (Brown, 2010) with a justification of retrospective diagnosis rather than expect her readers to take it on trust, although some might argue that this is an unfair comment as Brown’s book is not aimed at a purely academic audience. Also, it is possible to construct the kind of argument Brown is likely to have used. (I don’t regard the absence of a justification of retrospective diagnosis as an example of writer-based writing as there are no indications that Brown herself is autistic!)

¹²⁰ At the time of writing, only two authors have quoted ‘Writers on the Spectrum’ (Brown, 2010): Aitken mentioned Brown’s book in relation to comments about a possible link between autism and creativity, and Deisinger referenced it when writing that Emily Dickinson may have had autism. I am therefore unable to add

and, to some extent, actually carried out by Fitzgerald, by identifying features of someone's writing that seem to be a reflection of the diagnostic criteria for autism e.g., a tendency not to consider the needs of the reader when writing (writer-based writing) would be expected to result from so-called theory of mind (ToM) difficulties in autism. Whilst the identification of possibly autistic writing features from the works of an author thought to be autistic followed by a search for these features reoccurring in other authors in order to retrospectively diagnose them with autism may appear a somewhat circular process, a case can be made for it. I think Brown would agree with me that when such features are observed in a significant number of apparently autistic authors but rarely, if ever, in apparently non-autistic authors, they can reasonably be treated as 'diagnostic criteria' for autistic writing. So when writers such as Fitzgerald (2004), Glastonbury (1997), and Ishisaka (2003a, 2003b) propose that some of these very same criteria can be seen in the writing of Wittgenstein, for instance, I think it is within the bounds of academic respectability to accept a hypothesis that the evidence – biographical, cognitive etc. – accumulated by various writers (including aspects of their own writing) suggests that Wittgenstein was autistic.¹²¹ If a set of 'diagnostic criteria' for autistic writing, observed in known autistic writers, enable one to make sense of the writing of an undiagnosed, historical literary figure, they have a value that should not be ignored. Even McGrath concludes his criticism of Fitzgerald's diagnosis of writers and other artists by writing about 'intriguing instances of how literary philosophy, freer from ideals of certainty, might advance valuable observations of human traits, and even conditions, centuries ahead of science' (McGrath, 2007, p. 21), adding in the final paragraph of his paper that:

any specific criticism by other authors of Brown's retrospective diagnosis methods or conclusions to my general discussion of retrospective diagnosis (Aitken, 2010; Deisinger, in Rotatori et al., 2011).

¹²¹ Having formed the view that Wittgenstein was most probably autistic, I am also inclined to the view that his preoccupation with language and creation of the concept of the language-game was a function of his autism i.e., his clearly evidenced inability to fully engage with language-games throughout his life. Fitzgerald considers that the absence of *any* social context of language from the early Wittgenstein's 'picture theory' of language and its later inclusion in his thinking (after he attained the age of about 40) in the language-game concept reflects the developmental delay in an autistic person's learning about social context in language (Fitzgerald, 2000b).

Fitzgerald's books, despite the rigid conclusions that may frustrate readers approaching them on terms associated more with 'the arts'¹²², might yet prove significant early texts in a scientific field that schools of cultural and literary theory could ill-afford to ignore; equally, perhaps science can, likewise, ill-afford to ignore them.
(*ibid.*, p. 21)

Kafka has been diagnosed as autistic by various authors (e.g., Glastonbury, 1997; McDonagh, 2005; Olsen, 1986) and Wittgenstein likewise (e.g., Fitzgerald, 2004; Glastonbury, 1997; Ishisaka, 2003a; Ishisaka, 2003b). In the quotation at the head of this chapter Kafka's character K (not altogether surprisingly considered by many to be Kafka himself) asks his landlady for directions; my interpretation of this request being that an analogy may be drawn between what, on the face of it, appears to be a simple enquiry about how to get from A to B with the plea of an autistic person for some answers as to how to make his way in life. Naturally, a PNT person would be thoroughly confused by a question of this nature; so much so in this case that K's failure even to construe silence correctly makes his landlady's head spin. Wittgenstein seemingly attempts to explain to his sister (who cannot understand him any more than K can understand his landlady) why she cannot figure him out, resorting to the metaphorical language of her not seeing the difficulty he has in 'staying upright in the face of the storm raging inside him'. The autistic person makes the PNT head spin and the PNT head cannot understand the autistic storm within; perhaps a storm partly of the PNT sister's own making for being unable to understand her autistic brother. The language they both use is so similar that the point rushing to my attention is that *neither the autistic person nor the PNT person can understand the other.*¹²³ Of course, the reasons why neither can understand the

¹²² Interestingly, McGrath likens Fitzgerald's approach to diagnosing characters in novels with autism as "autistic reading" as, in his opinion, the manner in which it is undertaken itself involves various autistic traits i.e., it is 'predetermined by narrow interest in just one way of discussing characters, collecting consistent examples in a routine-like, formulaic manner to sustain a central theory' (McGrath, 2007, p. 19). However, he has the grace to add that his criticism could equally be applied to many other techniques for analysing text.

¹²³ These would appear to be examples of cross-neurological interaction, albeit one is fictional.

other are different; that is, a PNT person has probably had little or no experience of trying to figure out what it might be like to be autistic whereas the person with autism may simply not have the wherewithal to fully understand another person. But my hypothesis is that, in both cases, failure to ‘get’ the other is partly due to lack of interactional experience; the only difference between the two being in the *pervasive nature of the lack of interactional experience in the case of the autistic individual* but not the PNT person. However, I am getting ahead of myself; the theme of interactional experience will be returned to later.

My narrative review encompasses writers who have been thought to have the ‘ability’ to incorporate an autistic literary dynamic in their writings¹²⁴, writers who give the impression of having been autistic, and autobiographies written by individuals who have disclosed their autism. Writers diagnosed posthumously are Hans Christian Andersen, Sherwood Anderson, Samuel Beckett, Lewis Carroll, Emily Dickinson, Herman Melville, Henry David Thoreau, and Opal Whiteley (diagnosed by Julie Brown and others); Franz Kafka (diagnosed, amongst others, by Marion Glastonbury and Lance Olsen); and Ludwig Wittgenstein (diagnosed by Fitzgerald¹²⁵, Glastonbury and others) (Brown, 2010; Fitzgerald, 2000a, 2000b; Glastonbury 1997a, 1997b; Olsen, 1986). The writers of autistic biographies included in this review are Gunilla Gerland, Temple Grandin, and Donna Williams (Gerland, 1996; Grandin, 2000, 2001, 2006; Williams, 1996). I place a particular focus on Beckett, Gerland, Kafka, and Wittgenstein being the four listed writers not covered by Brown in her book on autistic writers and autistic writing (Brown, 2010). Given the danger of working on the basis of a

¹²⁴ It is arguable that the ability of a writer to incorporate an autistic literary dynamic in their prose has to mean that they are (were) autistic. I do not consider autistic writers capable of a PNT dynamic nor vice versa. I can find no example of PNT-style writing by an author considered to be autistic.

¹²⁵ Fitzgerald writes that “Wittgenstein met all the Gillberg criteria for Asperger syndrome (Gillberg, 1991)” and that ‘His difficulties in “affective contact with people” (Kanner, 1943) had a *major impact on his philosophical writing*’ (Fitzgerald, 2000b, p. 621, my italics) as well as on the subsequent trajectory of philosophy. Quayson (2010) suggests that Beckett’s literary work pre-empted the ‘discovery’ of autism by Kanner and Asperger; I believe that the insights that led Wittgenstein to write of the language-game – a concept which I believe provides a basis for a description of many difficulties seen in autism – were probably inspired by his difficulty with social interaction and social communication *and hence also pre-empt the two pioneers of autism*.

false 'diagnosis' of autism it was my intention to be as careful as I could be in the selection of authors for this review. I have only reviewed an author if there is a significant body of existing opinion that s/he was autistic or if a case for a diagnosis has already been made *and* my own reading of their works has convinced me of their apparent autism.

Features of autistic writing

As has been suggested to me by Luke Beardon (2012), it seems intuitively likely that the cognitive differences associated with autism would be less 'visible' in the writing of an autistic person than in their talk-in-interaction simply because when writing (and this would include electronic means of communication such as email¹²⁶) they will have more time available in which to gather thoughts and select the most suitable form of words. However, there may be aspects of autism that will form part of an autistic writer's writing style simply because they have autism and, if so, it may be possible to identify such stylistic features from an analysis of their writing. Julie Brown certainly thinks so. She considers she has identified the following identifying features of autistic writing and of the process by which autistics write: *messy writing process*; the '*problem of audience*' (which Flower refers to as writer-based writing); *breaking the rules*; *absence of sustained narratives / quality of randomness*; *absence of fully-drawn characters*; *multitudes of detail* (some might say a lot of detail that is not always strictly necessary); *rich use of language* (including rich symbolism); and a *recurring theme of alienation*, especially with posthumously diagnosed authors i.e., authors who never knew they were autistic (Brown, 2010). Quayson put forward *use of metonymy*¹²⁷

¹²⁶ I am currently undertaking a small research project with two colleges of further education in which I shall be interviewing students with autism *by email* as I see this as a more autism-friendly alternative to the traditional, face-to-face interview. The primary aim in interviewing via email rather than on the traditional, face-to-face basis is to reduce the potential stress to the interviewee, however, partly because the more relaxed approach should make it less stressful for the students, and partly because they will have more time in which to consider my questions and compose their responses, I hypothesise that it will produce improved results.

¹²⁷ Metonymy is a figure of speech that consists of the use of the name of an object or concept for that of another to which it is related, or of which it is a part, whereas a metaphor is a figure of speech in which a term or phrase is applied to something to which it is not related in order to suggest a resemblance.

(linked with a tendency of persons with autism to use association rather more than metaphor), an *interest in systems* (reflecting Baron-Cohen's empathising-systemising hypothesis), a tendency toward *egocentricity*, and a *preference for sameness / controllability* as possible further candidate features of autistic writing (Quayson, 2010). Taylor and Loughrey discuss the use of symmetry and mathematical permutation in Beckett's *Murphy* which, although not written about in a diagnostic context, may be considered as potential elements of an autistic interest in systems (Taylor and Loughrey, 1989). Sacks¹²⁸ refers to the existence of *gaps and discontinuities and abrupt topic changes* in autistic writing (Sacks, 1995). Chew suggests that autistic writing should be interpreted as a *type of poetry* rather than as prose, describing autistic writing as a 'fractioned idiom' (Chew, 2005, p. 1).¹²⁹

In a paper on the importance of online communication to autistics, Davidson proposes that 'distinctive autistic styles of communication ... can be conceptualized in Wittgensteinian¹³⁰ terms as "language games" ... associated with an autistic culture or "form of life" that is emerging alongside their practice, particularly online' (Davidson, 2008, pp. 791/2). Is it possible that the features of autistic writing that Brown, Quayson, Sacks and others believe they have discovered may be regarded as elements of an autistic 'language-game'?

Quayson is very sure of Beckett's ability to incorporate an autistic literary dynamic in his works, writing in respect of his first novel – 'Murphy' – that 'It is almost as if Beckett directly anticipated Hans Asperger but from within the literary sphere' (Quayson, 2010, p.

¹²⁸ This is a reference to the author Oliver Sacks not the conversation analyst, Harvey Sacks.

¹²⁹ The version of Kristina Chew's article on fractioned idiom and autism (where she highlights her thoughts on a link between autism and poetry) is marked "Do not cite without permission of author." I have obtained her permission to cite the article (Chew, 2012).

¹³⁰ It intrigues me that it may be possible to conceptualise autistic communication on the basis of a concept thought of by an individual considered by some to have been autistic himself!

842).¹³¹ Specifically, in the early part of his paper, he considers that this dynamic shows itself in the character of Murphy, the author's famous examination of "Murphy's mind", and 'perhaps most significantly, by introducing a series of shifts along the metonymic discursive axis that is articulated toward the end of the novel' (ibid., p. 842). On the following page, Quayson identifies three features of AS relevant to an understanding of Murphy namely, the systemising tendency that Baron-Cohen associated with AS (Baron-Cohen, 2008; Baron-Cohen et al., 2009), a tendency toward egocentricity, and a preference for sameness/controllability (Quayson, 2010). Later on he refers to 'three areas in particular in which the features of Asperger's syndrome are illustrated in the novel; in Murphy's aporetic speech/silence, in his quest for stillness, and in his fascination with systems and patterns [the latter being a repeat, NC]' (ibid., p. 846); it is on this second set of possible features that he focuses his review of 'Murphy' and, unfortunately, he says little about the first set. Whilst Quayson's subject matter is an *autistic dynamic* he identifies in Beckett's writing, and he is unsure whether this dynamic is due to Beckett being autistic or 'finely attuned to the nature of cognitive disorders'¹³² (ibid., p. 860), Walker and Fitzgerald believe that Beckett was autistic, having, in their view, shown distinct signs of AS (Walker and Fitzgerald, 2006).¹³³

Forming a view as to the neurological state (AS or PNT) of writers such as Beckett, Kafka, Wittgenstein or any other writer is fraught with difficulty given the complexity, ambiguity,

¹³¹ Adam Feinstein – writer of a recent history of autism – has pointed out to me in personal correspondence that 'there are passages in the depiction of Murphy himself which do, indeed, bear a remarkable resemblance to autobiographical writings by individuals with high-functioning autism or Asperger's syndrome' (Feinstein, 2012, np).

¹³² All Beckett's notable works were completed by 1961 whereas the syndrome identified by Asperger was not known about in the English speaking world until the early 1980s (and Asperger's paper was not translated into English until 1991) so, unless Beckett read the paper in the original German, he would have had to have been "finely tuned" to a cognitive state / diagnosis yet to be included in the diagnostic manuals. Of course, he could have based his dynamic on people that he knew – for instance, James Joyce, who Walker and Fitzgerald also consider to have had AS – but it seems rather more likely that an autistic dynamic reflects actual autism.

¹³³ Given that Walker and Fitzgerald suggested that Beckett may have been autistic before Quayson wrote about Beckett's ability to characterise autism in his novels it is arguable that the points Quayson makes about this 'ability' of Beckett's are a little less insightful than would otherwise be the case, however, Quayson may not have been aware of Walker and Fitzgerald's book; it is not cited in his article as a reference.

and difficulty of their writing (e.g. the need to have such an extensive knowledge of early philosophers to be able to decipher the coded messages in Beckett's work). Nevertheless, and accepting that I may be wrong, having read Beckett and about Beckett, I agree with Quayson that there is an autistic dynamic to his novels and with Walker and Fitzgerald that Beckett was on the autism spectrum (indeed, if one accepts the former it is almost necessary to accept the latter as well since it seems unlikely that there can be an autistic dynamic – in the cognitive sense¹³⁴ – without autism). I also believe there to be an autistic dynamic in the work of Kafka and Wittgenstein in addition to the authors reviewed by Brown (with one possible exception; Opal Whiteley). By drawing key points from my review of the work of these three authors – Beckett, Kafka, and Wittgenstein – in relation to the features of autistic writing proposed by Brown and others, it is my intention to demonstrate that the authors were probably on the autism spectrum *and* that the features of autistic writing used in my review provide a sound framework for evaluating the writing of an author vis a vis the identification of an autistic dynamic that is strongly suggestive of a writer being on the autism spectrum¹³⁵. I begin by considering the question of a predilection for systems in the writing of autistic authors as this is the only potential feature of autistic writing identified that, if established as an actual feature, directly reflects autism theory (the empathising-systemising hypothesis). I shall then move on to the other features of an autistic dynamic identified by Quayson (tendency toward egocentricity; preference for sameness / controllability; aporetic speech / silence / stillness) before reviewing the features of autistic writing identified by Brown.

¹³⁴ One can argue that there is an autistic dynamic in play in 'The Curious Incident of the Dog in the Night Time', a novel apparently written by a PNT author, but it is a deliberate dynamic visible in the plot and the narrative unlike 'Murphy' where the dynamic is a natural reflection of autism in my opinion.

¹³⁵ At first sight it may appear that the approach adopted for this review of autistic writing is a little circular in that features of writing considered to reflect an autistic dynamic have been used to determine whether or not an author is (or was) autistic which could in turn influence whether such features are regarded as features of an autistic dynamic. But, as mentioned earlier, each writer was evaluated against all the proposed features of an autistic dynamic and their writing was only used to exemplify autistic writing if there was good cause to consider them to be (or to have been) autistic. Reporting on author 'diagnosis' and the autistic writing dynamic separately would have involved considerable repetition and forced me to 'cut back' in other areas.

Interest in systems

According to Baron-Cohen, systemising is defined as ‘the drive to analyse and build systems, with the aim of understanding and predicting non-agentive events’ (Baron-Cohen, 2002, p. 302) in which systems may be ‘technical (e.g., the workings of a machine), natural (e.g., the process of coastal erosion), abstract (e.g., mathematics), motoric (e.g., a guitar playing technique), taxonomic (e.g., a criteria for ordering compact discs) or social (e.g., a taxation system)’ (ibid., p. 302). Quayson draws attention to the link between systems and repetitive behaviour, pointing out that ‘repetition (is) something that is arguably inherent in patterns and systems in the first place’ (Quayson, 2010, p. 844). I have not included repetition as a possible feature of autistic writing for review in this chapter (only in connection with autistic talk-in-interaction in the previous chapter) as I can find no researcher who treats repetition as a feature of autistic writing, however, it may be considered that the ‘systemising’ feature of autistic writing can be regarded as the written equivalent of repetitive talk.

Moving now to reviewing individual authors, Quayson and others refer to the depth and complexity of systemising at play in Beckett’s works (Quayson, 2010; Sage, 1975; Taylor and Loughrey, 1989; Webb, 1970) of which, arguably, the game of chess between Murphy and Mr Endon, in which layers of symmetry can be discovered within this abstract system is the best example¹³⁶ although there are plenty more such as the complex mathematical puzzle

¹³⁶ For anyone who wishes to appreciate the complex nature of some of Beckett’s systemising I commend Taylor and Loughrey’s analysis of the game of chess in ‘Murphy’ between the eponymous hero and Mr Endon (Taylor and Loughrey, 1989). In their analysis we are shown three levels of symmetry i.e., temporal symmetry (the order in which pieces are moved), mirror-symmetry (reflections in the players’ positions), and what the authors call Endon-symmetry (patterns in the placement of pieces at stages of the game deliberately produced by Mr Endon). It is a hugely complex undertaking. Since Beckett transcribes the entire game with Mr Endon it is clear to me that he is challenging his readers to understand what is going on in the game. But how many readers will have set up a chess board and played Beckett’s game? And how many of them will have understood the layers of symmetry? After a few moves Murphy understood that Mr Endon was not playing a traditional game

involving Molloy's sucking stones. In Wittgenstein's case the, probably unique¹³⁷, layered numerical numbering system – a further example of an abstract system – he adopted for his *Tractatus Logico-Philosophicus* (TLP), has been described by Monk as follows:

In its final form, the book is a formidably compressed distillation of the work Wittgenstein had written since he first came to Cambridge in 1911. The remarks in it, selected from a series of perhaps seven manuscript volumes, are numbered to establish a hierarchy in which, say, remark 2.151 is an elaboration of 2.15, which in turn elaborates the point made in remark 2.1, and so on. (Monk, 1990, p. 156)

An example of a focus on a technical system in Kafka would be the lengthy description of the penal colony execution machine of which the following is just a small part.

Yes, the Harrow," said the Officer. "The name fits. The needles are arranged as in a harrow, and the whole thing is driven like a harrow, although it stays in one place and is, in principle, much more artistic. You'll understand in a moment. The condemned is laid out here on the Bed. First, I'll describe the apparatus and only then let the procedure go to work. That way you'll be able to follow it better. Also a sprocket in the Inscraper is excessively worn. It really squeaks. When it's in motion one can hardly make oneself understood. Unfortunately replacement parts are difficult to come by in this place. So, here is the Bed, as I said. The whole thing is completely covered with a layer of cotton wool, the purpose of which you'll find out in a moment. The condemned man is laid out on his stomach on the cotton wool—naked, of course. There are straps for the hands here, for the feet here, and for the throat here, to tie him in securely. At the head of the Bed here, where the man, as I have mentioned, first lies face down, is this small protruding lump of felt, which can easily be adjusted so that it presses right into the man's mouth. Its purpose is to prevent him screaming and biting his tongue to pieces. Of course, the man has to let the felt in his mouth—otherwise the straps around his throat would break his neck." "That's cotton wool?" asked the Traveller and bent down. "Yes, it is," said the Officer smiling, "feel it for yourself." (Kafka, 1914, p. 3)

One could consider the majority of Thoreau's *Walden* – consisting as it does of highly detailed descriptions of the flora and fauna in and around a pond as an example of a natural

of chess but had his own unique ends in mind (returning his pieces to where they started) but, nevertheless, he eventually surrendered to Mr Endon; I suspect that Beckett rarely if ever surrendered to his readers.

¹³⁷ I mean that it is probably the only occasion on which a book on philosophy has been set out this way.

system, indeed Brown writes that ““Winter Animals” ... reads like a field guide for fauna common to New England: foxes, dogs, red squirrels, rabbits, deer, mice, hares, skunks, bears, wildcats, and so on’ (Brown, 2010, p. 61); Thoreau intended to write a book on native plant life but was unable to finish this project before his death (Brown, 2010). In my view there are sufficient examples of systemising at play in the work of *male* authors who were probably on the autism spectrum to reliably conclude that the focus on systems noted by Baron-Cohen as an aspect of autism (systemising being an aspect of his extreme male brain theory of autism) does impact on the writing style of some autistic authors; the difficulty in identifying systems in the writing of female authors on the spectrum may, of course, be that I have not looked hard enough but could also be explained by Baron-Cohen’s theory.

Before moving on to the next feature of the autistic narrative dynamic, I put forward a hypothesis based on (a) the general understanding that autism is seen much more often in men than in women (a ratio of four men to one woman is often quoted e.g. Ehlers and Gillberg, 1993), (b) that so much autistic autobiography has been written by women e.g. Gunilla Gerland, Temple Grandin, and Donna Williams, and (c) Baron-Cohen’s empathising-systemising theory of autism (Baron-Cohen, 2002). Could it be that the systemising that apparently leads to an interest in engineering, computers and the like in men is replaced in women by an abiding interest – led by reasonably intact empathising skills – in understanding themselves (autobiography) and others (novels) as well as they can given the difficulties they have with ToM? *And might it also be that there could be more women authors with autism than might be believed and, indeed, more women with autism than might be believed?*

Egocentricity

Egocentricity is defined as having little or no regard for interests, beliefs, or attitudes other

than one's own, in other words to be self-centered. Asperger wrote that 'Autistic children are egocentric in the extreme' (Asperger, in (Ed.) Frith, 1991, p. 81) stressing that they can go their own way without considering the needs or wishes of others or taking account of any 'rules' that apply restrictions or prescriptions in a particular situation. This is perhaps not unexpected given that Kanner identified 'extreme aloneness from the very beginning of life' (Kanner, 1943, p. 248) in these children although, apparently, it is not known whether the aloneness leads to egocentricity or vice versa. There appears to be little comment in the autism literature on egocentricity in adults¹³⁸, however, Frith and de Vignemont refer to naïve egocentrism in people with AS (Frith and de Vignemont, 2004) and, of course, it is entirely logical that childhood egocentricity in autism may lead to a greater degree of egocentricity in the autistic adult than is the case for their PNT peers. But the situation is likely to be more complicated than this, Kluth and Shouse writing that:

Some sources [the sources are not named, NC] suggest that those on the spectrum lack empathy or are egocentric. Although we know that some on the spectrum report struggling to see the viewpoint of another person, we also feel that the issue of empathy is sometimes overstated or misrepresented ... some of the reported problems with empathy could also be seen as problems of expression. In other words, those with autism might have problems understanding empathy and feeling it, and just as many might simply have problems *showing* concern and care.
(Kluth and Shouse, 2009, pp. 25/6, author's italics)

Bashe and Kirby report that 'many adults with AS have expressed that it is not that they don't 'feel' at all, but rather that they feel too much. Often these feelings are overwhelming and confusing' (Bashe and Kirby, 2001, p. 46). It could be that egocentricity apparent in autistic adults is exactly that but a synthesis of the comments referred to suggests that it might also on occasions simply be a conclusion drawn by a PNT person who naturally expects everyone

¹³⁸ I can find few references to egocentricity in autism outside childhood (the usual comments in relation to Piaget's work for instance) and none at all in some of the 'textbooks' I make very regular use of. It may, of course, be that some of the indexing has been deficient but it is too common for that to be a likely cause!

else to *show* empathy as well as feel empathy for another person. Whilst I have interpreted Quayson as referring to egocentricity when he talks of a ‘tendency to follow their own desires and beliefs rather than paying attention to, or indeed acknowledging, others’ desires and beliefs’ (Quayson, 2010, p. 843) – and he does refer previously in his article to ‘extreme egocentricity’ (ibid., p. 840) – such a tendency could also be interpreted in relation to the non-conformity associated with many persons with AS. A further point to highlight is that empathising is the reverse of systemising in Baron-Cohen’s extreme male brain theory, suggesting that a tendency to systemise should be seen in people with autism (including, of course, autistic writers) with a corresponding reduction in their ability to empathise (Baron-Cohen, 2002), the latter of which could be interpreted as egocentricity. By reference to the distinction Bhaskar draws between open and closed systems, Lawson, Baron-Cohen and Wheelwright have put forward a tentative hypothesis that people systemise when faced with a closed system and resort to empathy with an open system¹³⁹ i.e. that ‘empathising and systemising (may be) human adaptations to a crucial environmental distinction’ (Lawson, Baron-Cohen and Wheelwright, 2004, p. 308). There is much in the autism literature about the preference autistic people have for situations where rules can be applied (closed systems) and the difficulties they can experience in situations, especially social situations, requiring a flexibility of response (open systems). It seems appropriate to search for examples of so-called ‘egocentricity’ in autistic writing involving empathic difficulty and, possibly, even a wish on the part of some autistic authors to attempt to convert open systems into closed systems¹⁴⁰. There is a close link between egocentricity / difficulties with empathy and other

¹³⁹ With closed systems it is possible to obtain ‘closure’ through application of rules whereas with an open system closure is not possible due to a lack of regularity (Lawson, Baron-Cohen and Wheelwright, 2004).

¹⁴⁰ As an example of an autistic wish for an open system to be converted into a closed system, despite the realisation that it could never be fully achieved, the following WrongPlanet.net posting under the topic ‘The autism social rulebook’ is quoted: ‘The problem has always been that we can’t possibly think of every scenario where social confusion may arise. But if we pull our collective knowledge together maybe we can make an ever evolving book of social rules that we can each add to and refer back to in times of need. It wont (sic) cover everything but over time if we all add to it, it will become very helpful.’ (WrongPlanet.net, 2008)

aspects of autistic writing reviewed (e.g., absence of fully-drawn characters) so at this stage I shall seek to identify examples that do not appear to fall under any of the other categories.

For examples of egocentricity there is no need to look any further than Wittgenstein who, in his TLP, and unlike any other books on philosophy I can think of written either before or since, tends to make assertions without supporting argument, apparently on the basis that he cannot be anything but correct in all that he thinks and writes¹⁴¹. When refusing to revise his Bachelors degree thesis (the TLP) to include a preface and references and otherwise follow standard university practice, he wrote the following letter to *a friend who had agreed to try and help to get the TLP accepted by the university as his degree thesis*:

Your letter annoyed me. *When I wrote Logik I didn't consult the Regulations*, and therefore I think it would only be fair if you gave me my degree without consulting them so much either! As to Preface and Notes; I think my examiners will easily see how much I have cribbed from Bosanquet. – If I am not worth your making an exception for me *even in some STUPID details* then I may as well go to HELL directly; and if I *am* worth it and you don't do it then – by God – *you* might go there.

(Wittgenstein, in Monk, 1990, p. 103, original author's italics apparently)

Whilst the TLP is a work of genius, and Wittgenstein was frustrated enough about its initial reception (by people – including his philosopher colleague Bertrand Russell – who he felt were incapable of understanding it) to talk of committing suicide (Monk, 1990), his apparent total failure to see the matter from any perspective other than his own marks this letter as, an extreme, example of the egocentricity of an autistic author. It is possible to see egocentricity in many of the other authors under review as well, for example, Beck writes that *only two of Opal Whiteley's writing projects were not based on herself* i.e., 'didn't feature Opal Whiteley

¹⁴¹Despite considering that his TLP had solved all possible philosophical problems, Wittgenstein later accepted that his earlier work was flawed and changed his mind over matters such as the nature of language.

as a central element of the work' (Beck, 2003, p. 177, my italics)¹⁴²; and Seelig states that 'Samuel Beckett's works *originate as highly personal accounts of the author's life* and gradually evolve into elusive, enigmatic texts (whereby) autobiography provides the foundation for writing that then undergoes a painstaking process that purges the text of the author's identity' (Seelig, 2000, p. 1, my italics). Gray remarks in connection with his identification of bachelorhood as a particular theme within the writing of Kafka (many of whose main protagonists are bachelors, including 'Josef K' in *The Trial* and 'K' in *The Castle*) that many of these bachelor characters display excessive egocentrism (Gray, 2005). It might also be argued that the plethora of autobiographies by autistic writers is suggestive of egocentrism in autism more generally. But the issue of egocentricity is not straightforward; many authors write about themselves directly or indirectly and they are not all autistic, and it has already been noted that there may be a confusion between egocentricity and difficulties with empathy. Character egocentrism could be a literary ploy, a constant need to write about oneself does not have to be as a result of autism, and even very obvious egocentrism such as that displayed by Wittgenstein could be the consequence of an obsessive dedication to a special interest allied with a lack of social understanding (so a result of something other than autistic egocentrism). My conclusion is that there is insufficient evidence to support the inclusion of egocentricity as a typical feature of autistic writing but that the social difficulties associated with a diagnosis of autism (APA, 2000; WHO, 1993) which result in the autistic aloneness first identified by Kanner (1943) may give the appearance of egocentricity.

¹⁴² I have my doubts as to whether Opal Whiteley was autistic. However, as I have not proposed egocentrism as a specific feature of autistic writing caused by autism this reference to Whiteley has been retained.

Preference for sameness / controllability

The controllability identified by Quayson as a potential feature of autistic writing (Quayson, 2010) aligns with the formulaicity¹⁴³ and repetition features of autistic talk-in-interaction discussed in the previous chapter and reflects the ‘anxiously obsessive desire for the preservation of sameness’ identified by Kanner (1971, p 140) which is seen in attempts to keep control of situations as much as possible and in repetitive behaviour. Kanner (1943) refers to the exercise of power and control over objects in the children he had seen. Quayson does not expand directly on the ‘preference for experiences that are controllable rather than unpredictable’ (Quayson, 2010, p. 843) but considers this to be one of the features that are ‘most pertinent to a reading of *Murphy*’ (ibid., p. 843, title italics) in that the systems and patterns he focuses a whole section of his article on can clearly be seen as an aspect of a preference for sameness and for things that can be controlled. But it is my intention to move on now to the next potential feature of autistic writing as I believe that the *systemising* feature already discussed reflects the preferences for sameness and controllability in the context of writing. I do not think that sameness in writing in the sense of a lack of variety and creativity is found in autistic writing any more than in neurotypical writing, indeed the richness of autistic language identified by Brown can make it highly original (Brown, 2010).

Aporetic speech / silence / stillness

Quayson it is who identifies aporetic speech, silence and stillness as potential features of an autistic writing dynamic. In relation to his analysis of Beckett’s *Murphy* he states that ‘what makes [Murphy’s, NC] speech ultimately assimilable to the category of autistic silence is its elusive nature and the ways in which it appears to generate aporia rather than produce meaning’ (Quayson, 2010, p. 846); in other words that Murphy is silent in terms of the

¹⁴³ For a definition of formulaicity see page 95.

production of meaning in what he says rather than in not talking. Quayson considers that the difficulty, if not impossibility in some cases, of determining the meaning of Murphy's talk 'may very well stand as a description for Beckett's work as a whole. For it is a good summation of the language of *Endgame*, *Waiting for Godot*, *Krapp's Last Tape*, *Happy Days*, and of the prose works in general' (ibid., p. 847, title italics). He concludes that 'Murphy's silence is assimilable to the condition of AS because its effect is not to produce meaning and sociability but, due to its aporetic elusiveness, to further encase him within his own isolation' (ibid., p. 847). As far as I am aware, Quayson is the only writer to put this hypothesis forward although I think it is linked closely to the issue of alienation often seen in characters in the writing of autistic authors (other examples would be the protagonists in Sherwood Anderson's *Winesburg, Ohio* short stories such as Elmer Cowley, Enoch Robinson and Wing Biddlebaum); Kafka's Josef K., 'K', and Gregor Samsa – the main characters in *The Trial*, *The Castle*, and *Metamorphosis* respectively – and many others; together with Bartleby in Melville's *Bartleby the Scrivener* (in fact it would be difficult to imagine any character more alienated, isolated and alone than Bartleby). It may be that Quayson's silence and stillness should be seen as a separate feature of autistic writing in its own right but, given the close connections between silence, stillness, aloneness and alienation, and with no other writer having sought to treat silence / stillness separately I regard these as elements of the proposed 'alienation' feature of autistic writing.

Messy writing process

It is Brown who suggests that autistic writers often have a messy writing process¹⁴⁴, making reference to Hans Christian Andersen, Henry David Thoreau, Lewis Carroll, Opal Whiteley,

¹⁴⁴ A particular aspect of the writing process of various autistic authors (Brown refers to Andersen, Carroll, and Whiteley) is the use of a 'cut and paste' method (Brown, 2010). In this regard Brown refers to Carroll and Whiteley having cut up and reassembled their work and to Andersen having cut up other people's work for use in his *autobiography* (Brown, 2010). Is it possible to draw an analogy between Andersen's cutting and pasting

Luke Jackson, and Temple Grandin (Brown, 2010). To this list could be added Franz Kafka who wrote in a particularly haphazard way. However, whilst it may be the case that autistic writers are more likely than PNT authors to prepare their texts in a disorganized manner, this is a feature of the *process of writing* rather than of the actual writing, hence will not be considered further in this review of the literature in relation to autistic writing.

The ‘problem of audience’ (writer-based writing)

The second of Brown’s proposed features of autistic narrative – described under the heading ‘The Problem of Audience’ – is introduced with the comment ‘While writing a novel or story or poem, the author with autism is less likely to be thinking about the reader’s needs than a neurotypical writer would’ (Brown, 2010, p. 17), and explained by reference to the ‘way autism affects an individual’s social sense’ (ibid., p. 17). Thirty years before Brown wrote her book Flower introduced her concept of writer-based prose which she defined as:

a verbal expression written by a writer to himself and for himself. It is the record and the working of his own verbal thought. In its *structure*, Writer-Based prose reflects the associative, narrative path of the writer’s own confrontation with her subject. In its *language*, it reveals her use of privately loaded terms and shifting but unexpressed contexts for her statements. (Flower, 1979, pp. 19/20, author’s italics)

Whether the issue is considered in terms of it being a matter of a writer being less likely to consider the needs of their reader or actually writing for herself or himself, the concept is clear – both Brown and Flower (independently I suspect as the earlier author, Flower, is not referenced by Brown) are describing an approach to writing undertaken primarily *for the benefit of the writer* himself or herself or, in other words, they are producing writer-based writing rather than writing aimed at readers. There may be an element of egocentricity at

and Beckett’s extensive use of quotations? Cutting and pasting is of particular interest to me as I have worked with an adult with AS who makes extensive use of this technique in correspondence; although highly articulate, he seems almost unable to write *without including extensive amounts of text from other sources*.

play here, however, and although Flower makes a connection between her concept of writer-based prose and egocentrism, in my view the concept does not *necessitate* egocentricity and may, as she points out herself, simply be a result of a naturally associative writing style (a style, interestingly, that would be an excellent fit with the associative autistic thought processes mentioned previously) (Flower, 1979) or, perhaps, the deliberate use of the technique to explore the being-in-the-world of the writer or, as Brown suggests, a means of coping with stress (Brown, 2010). In her paper, Flower discussed the concepts of the egocentric talk of the child and inner speech of the adult which Piaget and Vygotsky wrote at length about¹⁴⁵. Flower regards writer-based prose as the analogue of egocentric speech and inner speech but not as a stage in the development of a writer's ability to write as egocentric speech and inner speech are considered by followers of Piaget as part of the development of a child's cognitive capacity; in other words, she treats writer-based prose as a technique that a write may *choose to use* writing that 'for adults it does represent an available mode of expression on which to fall back' (ibid., p. 22). She regards a writer-based approach to the thinking needed to construct prose as being a 'less cognitively demanding mode of thought and one which explains why people, who can express themselves in complex and highly intelligible modes, are often obscure' (ibid., p. 22) which immediately makes one think of the complexity and relative obscurity of much Beckett, Kafka, and Wittgenstein prose¹⁴⁶. Flower also sees writer-based prose as a means of overcoming the significant cognitive demands on working memory of the writing process, stating that

Composing, then, is a cognitive activity that constantly threatens to overload short-term memory. For two reasons Writer-Based prose is a highly effective strategy for dealing with this problem.

1. Because *the characteristic structure of Writer-Based prose is often a list* (either of mental events or the features of the topic) it temporarily suspends the additional problem of forming complex concepts.

¹⁴⁵ The next chapter will consider the work of Piaget and Vygotsky in more detail.

¹⁴⁶ It also makes me think of Habermas.

2. *Taking the perspective of another mind is also a demanding cognitive operation ...* Adults choose not to do it when their central processing is already overloaded with the effort to generate and structure their own ideas.

(*ibid.*, p. 36, my italics)

The references to lists of mental events and topic features brings to mind the long lists of items seen in an apparently autistic writers such as Thoreau and Whiteley. The mention of taking the perspective of other minds has a very obvious link to ToM.¹⁴⁷ Taken together, and in the light of Flower's views generally, there would seem to be a good case to be made that writer-based prose may on occasions be a reaction to the difficulties autistic writers face with only a partially developed ToM and, often, also with poor working memory capacity. It is my hypothesis, therefore, that writer-based prose may be either a deliberate technique used by authors with poor working memory and/or a *natural result of autism*; indeed, I suspect that it may be that writer-based prose is generally seen either as part of an autistic writing dynamic or in cases where the writer has a particularly poor working memory. It would, of course, be necessary to identify writer-based prose produced by a PNT writer with good working memory to be able to say for certain that such prose is not a natural result of poor working memory and/or autism rather than a technique that a writer can choose to adopt.

One further point made by Flower I wish to draw attention to is her concept of writing being a 'multistage process' (*ibid.*, p. 37) whereby writer-based prose is transformed into prose designed for the needs of readers. She considers that poor writers may be failing to transform their writer-based prose into something more appropriate for their readers, describing writer-

¹⁴⁷ Later on in this thesis I critique the ToM theory of autism, however, in referring to ToM here I have in mind the so-called 'mind reading' abilities that I do not doubt are affected in autism.

based prose as an ‘undertransformed mode of verbal expression’ (ibid., p. 19). If a writer-based dynamic results from autism such transformation will probably not be possible.

In my view, all the authors reviewed – from Andersen to Wittgenstein – wrote writer-based prose; one extract from Thoreau’s ‘Walden, or Life in the Woods’ describing the animals in and around Walden Pond having to suffice as an example of a type of writer-based prose.

There have been caught in Walden, pickerel, one weighing seven pounds, to say nothing of another which carried off a reel with great velocity, which the fisherman safely set down at eight pounds because he did not see him, perch and pouts, some of each weighing over two pounds, shiners, chivens or roach, (*Leuciscus pulchellus*,) a very few breams, and a couple of eels, one weighing four pounds, - I am thus particular because the weight of a fish is commonly its only title to fame, and these are the only eels I have heard of here; - also, I have a faint recollection of a little fish some five inches long, with silvery sides and a greenish back, somewhat dace-like in its character, which I mention here chiefly to link my facts to fable. Nevertheless, this pond is not very fertile in fish. Its pickerel, though not abundant, are its chief boast. I have seen at one time lying on the ice pickerel of at least three different kinds; a long and shallow one, steel-colored, most like those caught in the river; a bright golden kind, with greenish reflections and remarkably deep, which is the most common here; and another, golden-colored, and shaped like the last, but peppered on the sides with small dark brown or black spots, intermixed with a few faint blood-red ones, very much like a trout. The specific name *reticulatus* would not apply to this; it should be *guttatus* rather. These are all very firm fish, and weigh more than their size promises. The shiners, pouts, and perch also, and indeed all the fishes which inhabit this pond, are much cleaner, handsomer, and firmer fleshed than those in the river and most other ponds, as the water is purer, and they can easily be distinguished from them. Probably many ichthyologists would make new varieties of some of them. There are also a clean race of frogs and tortoises, and a few muskrats in it; muskrats and minks leave their traces about it, and occasionally a travelling mud-turtle visits it. Sometimes, when I pushed off my boat in the morning, I disturbed a great mud-turtle which had secreted himself under the boat in the night. Ducks and geese frequent it in the spring and fall, the white-bellied swallows (*Hirundo bicolor*) skim over it, and the peewees (*Totanus macularius*) “teter” along its stony shores all summer. I have sometimes disturbed a fishhawk sitting on a white-pine over the water; but I doubt if it is ever profaned by the wing of a gull, like Fair Haven. At most, it tolerates one annual loon. These are all the animals of consequence which frequent it now.
(Thoreau, 1995, pp. 119/120, author’s italics)

Breaking the rules

There is a continuing debate about the apparent association between AS and creativity (e.g., Craig and Baron-Cohen, 1999; Fitzgerald, 2004; Happé and Frith, 2009; Happé and Vital, 2009). Certainly, many autistic authors have been known for a tendency for unconventional writing styles that break the mould (Brown, 2010). In this regard one can place *all* the writers already referred to in this review. Reverting to an original source, it can be seen that Asperger wrote that ‘the language production of autistic children ... especially the intellectually gifted among them, undoubtedly have a *special creative attitude towards language*. They are able to express their own original experience in a *linguistically original form*’ (Asperger, in (Ed.) Frith, 1991, p. 70/71, my italics) and there is no reason to believe that such creativity and originality would not, to some extent, survive into adulthood.

Sherwood Anderson went so far as to create a new genre – the short story cycle in which novel-type plotting is written up in the form of linked short stories – described as a ‘breakthrough ... (which) is incredibly important to American literature’ (Brown, 2010, p. 173) in that it influenced many American writers after Anderson to adopt the short story cycle for their fiction writing. It is Brown’s opinion that ‘(this) innovation might not have been possible had (Anderson) been a neurotypical writer who ‘followed the rules’ because he worried too much about what others thought’ (ibid., p. 175). I have already mentioned that Wittgenstein produced a degree thesis that almost completely ignored the standard practice of the day (no preface; no referencing; few arguments to support his hypotheses which were set down as if they could not possibly be anything other than gospel truth) and, when it was rejected, wrote to a friend stating that as he had not consulted the university’s regulations

before writing the thesis he did not think the university should either!¹⁴⁸ Two more examples will have to suffice; firstly, all those many people who have read *Alice's Adventures in Wonderland* and *Alice Through the Looking Glass* cannot fail to have noticed the highly unusual nature of the characterisation, plotting and everything else about them. With reference to the extensive literary references incorporated in these books¹⁴⁹, Brown writes that 'In the first three short chapters of *Alice's Adventures in Wonderland* alone, there are, according to the Oxford University Press edition ... a reference to a Norman MacLeod poem, a parody of an Isaac Watts poem, a reference to a Latin grammar book, a reference to Haviland Chepmell's English history book, a reference to the *Aeneid*, and a parody of a Robert Southey poem' (Brown, 2010, p. 119, author's italics). In his later writing, Beckett developed some highly experimental forms including "How It Is", consisting of lengthy pieces of unpunctuated prose; works focused on characters placed in containers (e.g. holes in the ground and boxes); and "Lessness" in which he used 'random permutation to order sentences' (Drew and Haahr, 2002, p. 1). It is, in my view, very clear that autistic writers are eminently capable of breaking the literary rules and that many have done so, indeed it is difficult to see that any of the autistic authors under review have not in some shape or form produced work that is original and unconventional to say the least.

Absence of sustained narratives / quality of randomness

Brown refers to research into the inability of autistic authors to sustain a narrative because of the 'lack of central coherence or executive function' (Brown, 2010, p. 21), quoting Rimland

¹⁴⁸ Wittgenstein referred to 'STUPID details' (Wittgenstein, cited in Monk, 1990, p. 103, original author's capitals) in this letter to a friend helping him with the submission of his thesis; it is a moot point whether university rules and regulations for the submission of theses should override a work of genius since, if rules are to take precedence over exceptional creativity, there is a risk of a work of art such as this not seeing the light of day – of course, rules and regulations are designed for the preponderance of submissions with works of art such as the *Tractatus* of necessity being rarities.

¹⁴⁹ One could, of course, have mentioned Beckett in this context instead of Carroll, the former's writing probably being even more replete with literary and philosophical references.

who wrote that ‘autistic persons experience life as an incoherent series of unconnected events’ (Rimland, in Brown, 2010, p. 21), and concluding that ‘writers on the spectrum often struggle with plot’ (Brown, 2010, p. 21). The writers Brown researched all struggled with the writing of full-length novels and although Beckett, Kafka and Joyce are renowned for their novels as well as for other works, one can argue that the gaps and discontinuities in their work (discussed later on in this chapter) and the need they often had to redraft work many times suggest that they may have had some difficulty in sustaining narrative over the longer forms of fictional writing. Brown has noted that ‘Sherwood Anderson wrote several unsuccessful novels before turning to short stories. Many of Melville’s novels were not of good quality, and he found short fiction to be “more manageable”’ (ibid., p. 22). She also identifies a ‘quality of randomness’ (ibid., p. 22) in the work of Carroll and other autistic authors that she considers to be due to an inability to sustain narrative. So clearly Brown feels that autistic authors generally either write in a medium – such as poetry or short stories – that do not require sustaining narrative at novel length or, if they do attempt novel length work, tend to produce prose that reflects an inability to sustain narrative for long periods. Of course, there are likely to be exceptions to any general rule which may account for any autistic authors capable of sustaining narrative such as Beckett and Joyce, although one can argue that, whilst their language is complex, the actual story lines these two authors produce can be either quite simplistic¹⁵⁰ (e.g. *Murphy* and *Molloy*), based on existing plotting by a previous author used as a template (e.g. *Ulysses*), or demonstrate the quality of randomness referred to by Brown (e.g. *Lessness*). This latter piece (*Sans* in the original French)¹⁵¹ was

¹⁵⁰ Naturally I am not for a moment suggesting that Beckett’s language or meanings are simplistic, only that his *plots* can be really quite simple e.g. a group of people going to England to trace the whereabouts of someone.

¹⁵¹ Beckett wrote ‘Lessness’ as follows: ‘(he) wrote his sixty different sentences in six families, each family arising from an image. Beckett wrote each of these sixty sentences on a separate piece of paper, mixed them all in a container, and then drew them out in random order twice. This became the order of the hundred twenty sentences in *Sans*. Beckett then wrote the number 3 on four separate pieces of paper, the number 4 on six pieces of paper, the number 5 on four pieces, the number 6 on six pieces, and the number 7 on four pieces of paper. Again drawing randomly, he ordered the sentences into paragraphs according to the number drawn, finally totalling one hundred twenty’ (Drew and Haahr, 2002, p. 3). Could text be any more random?!

produced by *random ordering of both sentences and paragraphs*. Although ‘Lessness’ is an extreme example of deliberate randomness, the many examples of this feature as well as the absence of sustained narratives do, indeed, appear very often as aspects of an autistic writing dynamic as has been proposed by Brown.

Absence of fully-drawn characters

Asperger wrote in regard to the paper in which he introduced the syndrome now named after him that ‘It has been my aim to show that the fundamental disorder of autistic individuals is the limitation of their social relationships’ (Asperger, in Frith, 1991, p. 77). Indeed, it is of the greatest importance that both Asperger *and* Kanner chose to adopt the term autism – derived from the Greek ‘autos’ (or ‘self’) and first used to describe the characteristic of social withdrawal¹⁵² – for the children they had seen, Kanner stating that ‘the fundamental disorder is the children’s *inability to relate themselves* in the ordinary way to people and situations’ (Kanner, 1943, p. 242, author’s italics) and Asperger that ‘their behavior in the social group is the clearest sign of their disorder’ (Asperger, in (Ed.) Frith, 1991, p. 77). There are various theories – none as yet proven – to explain this social withdrawal of which ToM is perhaps the leading theory. Whatever the reason for the difficulties persons with autism have in relating to others, it is this very point that strongly suggests that autistic writers will have (varying) degrees of difficulty in developing their characters and, because of this, whether consciously or not, there will be a tendency to adopt a narrative style that keeps characterisation to a necessary minimum. Brown writes that it ‘seems reasonable to assume that in order for an author to create compelling, complex, realistic characters, he or she must have some understanding of human nature. Yet human nature is the one area of knowledge that

¹⁵² The word ‘autism’ was first used to describe social withdrawal in schizophrenia. The concept of withdrawal is misleading in the context of autism as an autistic person has difficulty relating to others from the beginning of their life as against the gradual reduction that is seen in schizophrenia and which ‘withdrawal’ implies.

individuals with AS struggle with the most' (Brown, 2010, p. 24) so that 'A lack of knowledge of human nature makes creating characters problematic' (ibid., p. 25).

Brown has identified three strategies used by autistic narrative writers to avoid the problem associated with their difficulty in developing fully-drawn, realistic characters i.e., avoiding the need to create any fictional characters at all (e.g. Emily Dickinson rarely refers to people and Whiteley's childhood diary says far more about animals than about any of her relatives including her mother); avoiding any attempt to give depth to characters they introduce (e.g. Andersen's fairy story characters, Carroll's 'Alice' characters, and Yeats' regular use of folk heroes); and by creating characters that are a mirror image of themselves (e.g. Melville's *Bartleby*). It is not difficult to see that Kafka's characters – even his protagonists such as Josef K, 'K', and Gregor Samsa – are not much more than ciphers, their importance lying in what they do (or don't do) rather than in what they are; of course, one could make a similar case for the characters in the writing of Beckett and Joyce. For all the complexity of his writing, Beckett's characters appear to be vehicles for what he has to say, he has been known not even to give a character a name, and when he wrote radio plays 'his characters finally completely disembodied and (were) no longer physically present in the space of a theatre, existing only as sound waves' (Rice, 2011, np)! It is not my intention to try and add anything to the volumes of interpretation of Beckett's work; I leave the last word to him 'One must speak – man cannot possibly communicate with his fellows, but the alternative – silence – is irreconcilable with human existence' (Beckett, in Poetry Foundation, 2011, np).

Tendency to provide a lot of detail

Brown suggests that a combination of hyper sensitivity, excellent memory, and a tendency towards perseveration in relation to their special interests can result in autistic authors

providing great amounts of detail (a PNT might say, unnecessary amounts of detail) in their writings (Brown, 2010). She refers to the fact that '*Moby Dick* is filled with unusual details that Melville remembered from his years at sea' (Brown, 2010, p. 27, title italics) and that Opal Whiteley was fixated on French royal families, including many references to them in her childhood diary, even though she grew up in the woods of Oregon. To these examples can be added the lengthy details Thoreau provides in *Walden, a Life in the Woods* (an extract from which has already been quoted) which Brown refers to as including 'every kind of detail imaginable from water color to water temperature to water depth for many months' (ibid., p. 27). Although it may not be possible to argue that Beckett creates his worlds through the use of innumerable references to other writers, philosophers and others, and much of his meaning can only be gathered from an understanding of these references, he certainly appears fixated on their use. As for Kafka, close reading of his letters to Felice Bauer will very quickly show the extent of the detail (and unusual detail at that) he often includes. Actually, one need really only take a look at the size of the 'Letters to Felice' volume in that there are *570 pages of letters* (most of which are to Felice herself, but not all his letters to her survived!). Here is an extract from one of these letters *to his fiancée* (there is much debate over whether one of Kafka's reasons for writing at such length was an attempt, conscious or not, to ensure an engagement never led to marriage and one can only wonder why Felice Bauer allowed the correspondence (very few meetings were involved) to go on as long as it did (about five years from September 1912); love letters they are not).

For a long time now I have planned, and only my indolence has prevented me repeatedly from carrying it through, to cut out and collect from various papers news items that astonished me for some reason, that affected me, that seemed important to me personally for a long time to come; at a glance, they were usually quite insignificant, for instance just recently 'The beatification of 22 Christian Negro youths in Uganda' – (which I have just come across and am enclosing). I find something of the kind in the papers nearly every other day. News which seems to be meant only for me, but I haven't got the patience to start the collection for myself, let alone keep it up [but he had the patience to write these endless letters, sometimes more than one a day, to Felice, and kept

it up for five years, NC]. But I should do it with pleasure for you, and you, if it would amuse you, could do it for me. I am sure everyone feels there are certain news items not meant for every reader, but aimed only at certain readers here and there, in which the outsider could detect no reason for special interest, and such bits of news that specially affect you I should value more than any collection of mine, which I would send you without much regret. But don't misunderstand me: I mean only small clippings from daily papers, chiefly about actual happenings; clippings from magazines should be rare exceptions; don't think I want you to cut your beautiful periodicals to pieces for me. Besides, I read only the Prager Tagblatt, and that only very fleetingly, and of magazines only the Neue Rundschau, and also Palästina, which they have stopped sending me, although I am still a subscriber. (They probably think they did more for me with that one copy the night we met than they do for other subscribers in the course of a whole year – and they are right.¹⁵³) To start the collection with a fitting contribution, I am enclosing the report of a nasty trial. (Kafka, 1999, p.80)

Rich use of language (including rich symbolism)

On the matter of the language use of autistic children Asperger wrote that:

the intellectually gifted among them, undoubtedly have a special creative attitude towards language. They are able to express their own original experience in a linguistically original form. This is seen in the choice of unusual words which one would suppose to be totally outside the sphere of these children.

(Asperger, in (Ed.) Frith, 1991, pp. 70/71)

As an explanation of the originality and rich use of language by autistic children Asperger considered that it derived from their different perspective on life, writing:

Behind the originality of language formulations stands the originality of experience. Autistic children have the ability to see things and events around them from a new point of view, which often shows surprising maturity. (ibid., p. 71)

¹⁵³ In a previous letter in which Kafka writes at great length to Felice Bauer about his first meeting with her he states that 'The best I accomplished that evening was that I happened to have with me a copy of Palästina [Palestine, NC], for which I should be forgiven everything' (Kafka, 1999, p. 26) apparently, because its mention led to discussion of a trip to Palestine which in turn caused Felice to offer to shake his hand.

Brown mentions that most of the autistic writers she investigated were ‘hyper-lexic, reading far more books than the people around them, even as children. As a girl, Whiteley checked out hundreds of books from the Oregon State Library in Salem, angering the librarian by keeping most of them indefinitely’ (Brown, 2010, p. 32). Kanner’s first case study – Donald T. – learned the 23rd Psalm and the Presbyterian Catechism (involving twenty five questions and answers) before he was two years old (Kanner, 1943) and his other case studies are replete with examples of children who, though they may not have developed communicative language, clearly enjoyed the sounds of words. It is easy to see that a person with autism, if they have read widely and extensively from a young age, and developed a special interest in language and writing, ‘really *really* love words’ (ibid., p. 32, author’s italics). Coupled with an unusual perspective on life that enables them to see things around them differently to PNTs, this could translate into a career as a writer with a unique talent for expressing themselves in a rich form of language and in developing new styles of writing. Brown states that Tammet created his own language, Joyce could speak many languages (clearly, Beckett also had a gift for speaking foreign languages, indeed he switched from writing in English to writing in French and translated his work from one to the other), Carroll’s works are supreme examples of the invention of an idiolect, and ‘Nearly every time Dickinson put her pencil to paper, she used figurative devices’ (Brown, 2010, p. 106).

It is often said that autistic people have difficulty with metaphor, having a tendency to use association. There are many examples of use of association in the literature from Kanner onwards. For example, in his case study of Paul G., Kanner wrote that ‘At the sight of a saucepan he would invariably exclaim, “Peter-eater.” The mother remembered that this particular association had begun when he was 2 years old and she happened to drop a saucepan while reciting to him the nursery rhyme about “Peter, Peter, pumpkin eater”’

(Kanner, 1943, p. 227). However, Kanner pointed out that autistic children have a facility for using metaphor, albeit an idiosyncratic kind of metaphor ‘rooted in *concrete, specific, personal* experiences’ (Kanner, 1946, p. 243, author’s italics) and ‘can convey ‘sense’ only through acquaintance with the singular, unduplicated meaning which they [the metaphors, NC] have to the children themselves’ (ibid., p. 243). An instance of such personal metaphor is Kanner’s case study *Jay* who ‘referred to himself as “Blum” whenever his veracity was questioned by his parents’ (ibid., p. 243) because he had seen a newspaper advertisement for a furniture firm with the headline “Blum tells the truth”. Kanner suggests that the only difference between Jay’s use of Blum as a metaphor and the ‘designation of a liar as Ananias, a lover as Romeo, or an attractive lad as Adonis’ (ibid., p. 243) is that the latter metaphors are in common use (perhaps, more so when he wrote this in the 1940s!) whereas autistic metaphor is not directly communicable (ibid.). Happé contended that autistic people, even adults, find metaphorical language difficult (Happé, 1993). The autistic author Donna Williams, quoted by Brown, seems (correctly in my view) to have taken offense at the suggestion that autistics cannot understand or use metaphor in their own writing:

It seems to me my world is like a big string of metaphors, that I live in a big string of metaphors and that the rest of the world sees things based on meaning, literal meaning, but let me tell those of you with the luxury to rely on eyes and ears that can interpret fluently and broadly, the world of someone with receptive processing challenges is one where you make whatever close matches you can and many are nothing like you’d make if you could process fluently for interpretive meaning. So do I understand metaphor? I think so.
(Williams, in Brown, 2010, p. 105)

One only has to read Williams’ writing to appreciate that she *does* understand metaphor, and very well. Of course, a need to “make whatever close matches you can” could just as easily result in associative links such as those used at a young age by Paul G. and seen in the writing of many autistic adults, but clearly some adults with autism do understand metaphor despite

their other difficulties. Could this be due to hyperlexia as a child and a breadth and depth of reading that enables them to develop in ways that autism might not allow if an ability is not actively developed by extensive practice? It must be said, though, that the examples of Williams' metaphorical language quoted by Brown – a lift with tiled walls being compared to a bathroom; a classroom with a heat extractor being like a clothes dryer; and the comparison of a shiny black stone in a necklace with a television screen – do appear to be somewhat more associational in nature than PNT metaphors. One could argue that, although a tiled lift is not literally applicable to a bathroom the link being made is the existence of tiles in both; that, similarly, there is heat extraction going in both the classroom and the clothes dryer, and a black reflective surface is in both the necklace stone and the TV screen. But a metaphor expresses the familiar in relation to the unfamiliar e.g. Nordquist's reference to Neil Young singing, "Love is a rose" (Nordquist, 2011). Young's connection between 'love' and 'rose' is far less distinct than the much more literal link between Williams' lift and clothes dryer which has more of the explicit comparison of a simile. Yes, an autistic author may use metaphor but I believe that the associational aspect to autistic language originally identified by Kanner (Kanner, 1946), and which has been mentioned often in the literature since (e.g. Chew, 2005; Chew, in (Ed.) Osteen, 2008; Happé, 1995; Norbury, 2005; Rundblad and Annaz, 2010), is a key feature of autistic language even where more subtle figures of speech are clearly understood and used by an autistic author. Norbury considers that ToM skills are a necessary, but not a sufficient, condition for the understanding of metaphor, his hypothesis being that 'language ability in general and semantic skills specifically are important for metaphor comprehension' (Norbury, 2005, p. 396) i.e., an ability to understand and use metaphor requires both a sufficient ToM *and* general language ability. Norbury concludes from the results of his study that some of the pragmatic difficulties associated with autism may derive from "lower level linguistic deficits", writing as follows:

Only those individuals with autism who had concomitant structural language deficits were impaired on the metaphor task and they were indistinguishable from children with language impairment who did not have clinically significant autistic features. This finding suggests that at least some of the pragmatic deficits characteristic of autism may be attributable to lower level linguistic deficits.
(*ibid.*, p. 396)

This is a complex area of autism (as if there is an aspect of autism that isn't complicated!) but there are countless examples of autistic writers using exceptionally rich, figurative language including some aspects of language, such as metaphor and metonymy, that many have argued are difficult for persons with autism to master; rich language use is clearly a characteristic feature of an autistic literary dynamic despite the existence of ToM difficulties. For Hutto the simple fact that autistic individuals *can* 'learn words' (Hutto, 2008, p. 223), build a vocabulary, and develop an understanding of syntax and semantics, demonstrates that ToM abilities are *not* a necessary precondition for language learning (although it is arguable that such abilities *are* necessary for a mastery of pragmatics).¹⁵⁴ One is tempted to wonder whether rich language use might even be a function of a restricted theory of mind.

Recurring theme of alienation

Going back again to the pioneers, Asperger wrote of a 'shutting-off of relations between self and the outside world' (Asperger, in (Ed.) Frith, 1991, p. 39) being an essential feature of autism which 'can explain their difficulties and deficits as well as their special achievements' (*ibid.*, p. 39), and Kanner referred to an 'extreme aloneness from the very beginning of life' (Kanner, 1943, p. 248). The choice of the word autism – with its connotations of aloneness

¹⁵⁴ Interestingly, Hutto quotes Baron-Cohen – a leading proponent of the ToM theory of autism – in support of his argument that ToM abilities are not a necessary pre-condition for the learning of words. I take issue with Baron-Cohen's opinion (quoted by Hutto) that 'children with autism show us just how *useless* a language capacity is without theory of mind' (Baron-Cohen in Hutto, 2008, p. 223, my italics). The existence of *any* high quality autistic writing demonstrates that language capacity with a restricted ToM is not always "useless".

and separation – by both Asperger and Kanner to describe the children they had seen shows that it was, indeed, this particular aspect of the autistic presentation they considered to be at the very heart of autism.¹⁵⁵ More recently, Davidson refers to a ‘prevailing and powerful sense of alienation’ (Davidson, 2007, p. 659) in the autobiographical writings of three autistic authors.¹⁵⁶ Brown considers that alienation can be seen in the writing of *all* autistic authors, stating that ‘When an author with autism writes about his or her place among others in society, a theme of alienation prevails in these stories’ (Brown, 2010, p. 31). She is also very clear that the theme of alienation she sees in all autistic writing ‘is strongest among the authors who were never diagnosed with ASD’ (ibid., p. 31) because they *know* there is something different about them but do not know what it is. Differences that we now know are due to autism in a high-functioning adult would have been significantly less apparent in the English speaking world in days gone by, before there was an awareness of autism, and when there was less of a focus on the individual, less variety in socialising, less movement between the social classes and, in general, fewer situations in which such differences would be readily apparent; it is more likely that those who would now be diagnosed with AS or HFA would have tended to ‘blend in’ to society more easily than they may do now (of course, at the other end of the spectrum lower functioning persons would, regrettably, generally have been seen as no different from schizophrenics or psychotic people and so a polarity would have developed).

The writings of all three of the writers that are of particular interest to me – Beckett, Kafka,

¹⁵⁵ There is also a link here to Donna Williams’ hypothesis that autism involves an ‘inability to comprehend closeness (that) constrains the formation of attachments and inhibits attempts to make sense of one’s environment in infancy’ (Williams, 1992, p. 203).

¹⁵⁶ Davidson’s three autistic authors are Temple Grandin, Dawn Prince-Hughes, and Donna Williams.

and Wittgenstein – also demonstrate strong feelings of alienation¹⁵⁷. The stories told by Beckett and Kafka are too well known for me to need to expand on the matter of alienation that shines through so many of their characters but I will leave the last words on the matter of whether alienation is a typical feature of an autistic literary narrative to Kafka and Dickinson. At the end of the parable *In The Cathedral* in Kafka's *The Trial* he writes that 'The court asks nothing of you. It receives you when you come and it releases you when you go' (Kafka, 1994, p. 173). I interpret the trial of Josef K. as an allegory of the difficulties that life presents to a person with autism who does not have the wherewithal to develop the social relationships that lie at its heart, and this sentence – which needs to be understood in light of the parable as a whole – as showing that the court is life itself; which simply receives you and releases you. What better description of alienation from life itself could there possibly be? And, as Brown reminds us, Dickinson wrote in one of her poems 'This is my letter to the world, that never wrote to me' (Dickinson, in Brown, 2010, p. 19).

Metonymy

Introducing the subject of metonymy into his article, Quayson proposes that:

Murphy represents autism ... through the discursive and rhetorical disposition of the text as a whole. I outline the concept of a metonymic circle in order to map out the ways in which, towards the end of the novel, the text's inherently realist orientation is disrupted by a series of discursive transpositions between Murphy and Mr Endon" (Quayson, 2010, p. 838, title italics).

By metonymic circle Quayson appears to be referring to shifts in 'underlying logic that remains partially concealed by the realist discourse' (ibid., p. 855) by which he means, I think, that in the previously mentioned game of chess between Murphy and Mr Endon in the latter's cell in the Magdalen Mental Mercyseat hospital, a realist discourse on the surface (a

¹⁵⁷ Fitzgerald writes that 'Human beings always remained bewildering to [Wittgenstein, NC] and he admitted that he was hypersensitive to them and went off to live in isolated places in Norway or Ireland because he could not cope with the interpersonal stress of human beings' (Fitzgerald, 2000b, p. 622).

traditional game of chess) hides an underlying logic (Mr Endon's peculiar objective of bringing his pieces back to where they started on the board rather than achieve checkmate of his opponent) at odds with the realist discourse. In the course of the game Murphy realises what Mr Endon is attempting to do and adopts the same unconventional chess logic himself. Later on Mr Endon escapes from his cell and begins to mimic Murphy's role checking on the patients by turning on the lights outside their cells i.e., they each seem to become the other to some extent (Beckett, 1957; Quayson, 2010). Quayson writes of this as being a 'transfer of qualities between Murphy and Endon' (ibid., p. 859) and asks whether or not 'the text of the novel itself harbours the desire for some form of closure to which all its contradictions are assimilated and resolved into a *Silence?*' (ibid., p. 859, my italics).

I have tried to identify other examples of metonymic circles in the writing of known autistic authors (as opposed to ordinary metonymy) and am unable to do so (of course, that does not mean there are none to be found; it is, after all, a particularly complex concept). But, under the circumstances I do not at present suggest metonymy as a candidate feature of autistic narrative; indeed, Quayson may see metonymy as being linked to the aporetic speech / silence / stillness discussed earlier or with the matter of alienation to which I have suggested aporetic speech / silence / stillness is linked and to which metonymy may itself be linked. As a coda, Rundblad and Annaz recently completed what they describe as the first ever study of the development of metaphor and metonymy comprehension in autism¹⁵⁸, concluding that *autistic children of all ages have great difficulty in understanding metonyms.*

Children with autism showed an impaired metaphor comprehension in relation to both chronological and mental age, whereas performance on metonymy was delayed and in line with their receptive vocabulary. Our results suggest that

¹⁵⁸ The Rundblad and Annaz study 'examined the dynamics of developmental profiles of metaphor and metonymy comprehension ... (employing) developmental trajectories or growth models' (Rundblad and Annaz, 2010, p. 33). They consider that their approach gave them an 'ability to establish the relations among different experimental tasks/variables, assessing the extent to which performance on one task/variable predicts performance on another task/variable as well as to examine group and individual variability' (ibid., p. 33).

understanding of metaphors and metonyms are severely affected at all ages examined in the current study.
(Rundblad and Annaz, 2010, p. 29)

However, despite the Rundblad and Annaz finding, and the received opinion that persons with autism are said to have difficulty understanding metaphors, there are examples of autistic authors who have made good use of metaphorical language. It should be appreciated that Rundblad and Annaz's study involved children no older than eleven years of age and that they identified the need to investigate the other end of the autism spectrum (AS) 'as it is important to have a more comprehensive picture of pragmatic comprehension in ASD' (ibid., p. 42). This piece of research is an excellent start to the project to investigate development of metonymy and metaphor in children, and it is surprising to me, given that difficulty with this type of language is an aspect of 'One of the most noticeable problems in autism' (ibid., p. 29), that it is apparently the very first study to focus on this. This appears to be yet a further example of a failure of the research community to investigate issues at the heart of autism. Given that intellectual disability is regularly seen alongside autism, studies of figurative language use in autism must control adequately for intellectual disability if any reliable conclusions are to be drawn regarding use of such language in autism *per se*. I also support Rundblad and Annaz's call for longitudinal studies (ibid.) but suggest that pragmatic abilities should be tracked from early childhood to adolescence *and beyond* as there is no reliable data on how understanding of metaphor and metonymy develops into adulthood. I also call for research into understanding of metaphor and metonymy into adulthood by means of the analysis of the creative *writing* of those with autism to complement traditional studies.

Gaps and discontinuities

Sacks comments as follows on the gaps, discontinuities, and topic changes Happé found in the autobiographical writing of Temple Grandin and other autistic authors:

What one does see in Temple's writings (and in the writings of other very able autistic adults, not excluding some with marked literary gifts) are *peculiar narrational gaps and discontinuities, sudden, perplexing changes of topic, brought about* (so Francesca Happé suggests in a recent essay on the subject) *by Temple's failure "to appreciate that her reader does not share the important background information that she possesses."* In more general terms, autistic writers seem to get "out of tune" with their readers, fail to realize their own or their readers' states of mind.

(Sacks, 1995, p. 247, my italics)

In referring to Sacks' comments about the implied impact of ToM difficulties on the ability of some autistic authors to put themselves in the minds of their readers in order to produce writer-based prose, Brown adds that 'the author with autism often creates a text that is hermetically sealed – it makes sense to him or her, but not to the reader. Some of Emily Dickinson's poems are indecipherable' (Brown, 2010, p. 18), but appreciates that some of the confusion this gives rise to 'might also be deliberately introduced: Joyce's prose was at times so obfuscated¹⁵⁹ – such as the prose in *Finnegan's Wake* – that as he was writing he actually laughed out loud, imagining how stumped his readers would be when they read his novel' (ibid., p. 18). Was some of Beckett's prose also deliberately designed to make it difficult for his readers to decipher, or meant as a challenge to them, or just a reflection of autism? Jurecic writes about Grandin that 'Her writing is "autistic" in large part because, even after

¹⁵⁹ One has to be cautious before attributing Joyce's obscurity to autism rather than to his classical education or to the tendency at the time he was writing for authors to fill their work with classical references (e.g., Ezra Pound and T. S. Elliot). One cannot be absolutely sure about any retrospective diagnosis of autism (or of anything else) and even if one could be sure about such a diagnosis there would still be no proof that a writer's obscurity was due to the autism rather than to some other factor such as education or writing styles current at the time of writing. However, when multiple indications of autism in an individual author are identified a tentative case can then be made for a diagnosis and when indications of autistic language methods are identified across multiple authors – both those with a retrospective diagnosis and those known to have (or have had) autism – I believe there is justification for hypothesising that the retrospectively diagnosed authors probably did have autism and that their writing is therefore autistic writing. When this approach is adopted it is no longer a case of saying that someone was autistic because they wrote in an autistic style because they were autistic!

she has written six books and dozens of articles, she still cannot consistently define a line of argument, guide a reader from one point to the next, or supply background for references that will otherwise be unclear' (Jurecic, 2007, p. 429) unless, presumably, she uses the services of a co-author or editor. There are many gaps, discontinuities, and abrupt changes of direction in Kafka's writing in my view. (Discontinuities in the writing of Kafka are the subject of discussion by Deleuze and Guattari but I think they are referring to something on a higher plane (Deleuze and Guattari, 1986)¹⁶⁰ and, in any case, I cannot agree with much of what they write about Kafka that I can understand.) There is sufficient here I suggest for discontinuity to be regarded as a feature of an autistic literary dynamic being possibly due to limited ToM and/or a lack of social interactional practice in comparison to PNTs.

Having now 'completed' my detailed reviews of autistic talk-in-interaction (Chapter V) and autistic narrative writing (this chapter) I can now report on my work in developing a synthesis of the findings of both reviews with a view to ascertaining if there are any commonalities between them. This is the subject of the following chapter which, in turn, is followed in later chapters by consideration of autism theory from a linguistic perspective in the light of the findings and synthesis of the reviews of autistic talk and writing.

¹⁶⁰ I cannot agree with Deleuze and Guattari's interpretation of Kafka. They write 'Only one thing really bothers Kafka and angers him, makes him indignant: when people treat him as a writer of intimacy, finding a refuge in literature, as an author of solitude, of guilt, of an intimate misfortune. However, that's really Kafka's fault, since he held out that interpretation in order to anticipate the trap through his humor. There is a Kafka laughter, a very joyous laughter, that people usually understand poorly. It is for stupid reasons that people have tried to see a refuge far from life in Kafka's literature, and also an agony, the mark of an impotence and a culpability, the sign of a sad interior tragedy. Only two principles are necessary to accord with Kafka. He is an author who laughs with a profound joy, a *joie de vivre*, in spite of, or because of, his clownish declarations that he offers like a trap or a circus. And from one end to the other, he is a political author, prophet of the future world ...' (Deleuze and Guattari, 1986, p. 41). Well, it seems I must be stupid as I've clearly read a completely different Kafka. Yes, of course there is much humour but he is never clownish. Most importantly, they misinterpret the thing that bothers him most – life itself. I suggest they have *achieved* a minor literature.

CHAPTER VII

A SYNTHESIS OF LANGUAGE METHODS FROM THE REVIEWS OF TALK AND WRITING

The perspective we adopt is expressed in the following two claims:

1. The process of acquiring language is deeply affected by the process of becoming a competent member of society.
2. The process of becoming a competent member of society is realized to a large extent through language ...

(Ochs and Schieffelin, 2009, p. 470)

Chapter V summarised my review of autistic *talk-in-interaction* data in response to the talk-in-interaction element of RQ 1: “What, if any, specific features of the talk-in-interaction and narrative writing of autistics that may reflect their autism are agreed upon or contested in the field or can be discovered?” Chapter VI then summarised my review of autistic *narrative writing* data in response to the narrative writing element of the same RQ, in both cases without attempting to identify specific features relating to autism. With the current chapter I aim to ‘complete’ the response to the first RQ by seeking to identify specific features of both autistic talk-in-interaction and narrative writing from my reviews of ethnomethodologically informed work in autism. I shall also be searching for any commonality between specific features of autistic talk-in-interaction and narrative writing (in response to RQ 2: “What, if any, commonality between autistic talk-in-interaction and autistic narrative writing is agreed upon or contested in the field or can be discovered?”) and comparing the concepts of ‘recipient design (failure of)’ and writer-based prose to see if these apparently analogous

concepts may explain aspects of autistic talk and writing at a conceptual level (in response to RQ 3: “Do the apparently analogous concepts of ‘recipient design (failure of)’ and ‘writer-based prose’ help to explain autistic talk-in-interaction and autistic narrative writing?”).

As the quotation from Ochs and Schieffelin on page 162 makes clear, the socialisation of a young child and its learning of its first language are inextricably linked; socialisation of the child largely occurs through the language training it gets with its parents and carers at home to begin with and, from school age, with its teachers at school and its peers as well as with its parents / carers and siblings, and the language training gained through contact with these others enhances its socialisation. So any circumstances that affect either the ability of the child to socialise or its ability to learn its language will be reflected in the developmental trajectory of the child. Both the social difficulties at the heart of autism and the issue of language are reflected, to a greater or lesser extent, in the diagnostic criteria for autism. Of course, if autism also involved a language disorder (rather than the language difficulties arising from the linkage between socialisation and language learning referred to) the socialisation difficulties would be compounded by language difficulties. Whether or not a language disorder is involved in autism, the processes of becoming competent speakers of one’s own language and competent members of society – which probably cannot be fully disengaged – are atypical in autism leading to a different developmental trajectory, a different ‘habitus’, a different personal epistemology, and a different personal ontology in the autistic person. That is why the issue of language in autism is so important that authors from the pioneers Asperger and Kanner onwards have highlighted language differences in autism and the need for investigation into those differences (Asperger, 1944; Kanner, 1943, 1946).

This thesis has focused on an attempt, through an in-depth review of the literature, to identify

autistic language methods in respect of both talk-in-interaction and narrative writing. My sources for the identification of potential features of autistic talk-in-interaction are set out at Table 3 below with the sources of potential features of autistic narrative writing in Table 4¹⁶¹. In some cases (echolalia for example) the potential feature has been so extensively researched that it is quite obviously a feature of autistic language; but in others (e.g. atypical socio-cultural indexicality understanding) I can only find one source for a suggested potential feature. Although it may seem illogical, in what follows I shall concentrate on the less obvious features on the basis that the case for others has been made and there is little point in going over old ground i.e., I cannot imagine any autism researcher arguing that echolalia is not a feature of autistic speech but the jury on socio-cultural indexicality understanding is probably still out. Indeed, the latter is an example of a potential feature that may not be well-known even amongst autism researchers so a full jury may not even be in place as yet! Two very important aspects of autistic talk – pronoun reversal and use of neologisms – although mentioned by some conversation analysts, do not appear to have been the subject of any actual CA research. For this reason only they do not appear in the following overview which covers matters investigated by conversation analysts. I do not think that any scholar would object to the inclusion of both pronoun reversal and use of neologisms in a taxonomy of autistic talk-in-interaction *in childhood*.¹⁶² Whilst I have had to review both child and adult CA (there is hardly any of the latter in peer reviewed articles), later on I present a tentative taxonomy of *adult* autistic talk and writing (excluding childhood features)

¹⁶¹ Table 3 omits reference to the ‘scaffolding’ of the talk-in-interaction of autistics and Table 2 omits reference to the ‘messy writing process’ of some autistic writers because both are features of *process*.

¹⁶² This is not to say that pronoun reversal and use of neologisms are *only* features of autism in childhood but that they are, at least, predominantly childhood phenomena and as such fall outwith the scope of this thesis. I would just take the opportunity to note Prizant’s view that ‘Pronominal reversal, another frequently cited ‘symptom’ of autistic language, is a frequent by-product of delayed echolalia ... If the child reproduces the utterances at a later time, the result is one of apparent pronominal confusion ... Actually, the child is probably not concerned as much with pronouns as with reproducing whole units’ (Prizant, 1983, p. 302) i.e., pronominal reversal may be another consequence of a preference for a gestalt mode of cognitive processing in autism.

Table 3: Sources of potential autistic talk-in-interaction features

Features of autistic talk-in-interaction	Source(s)
Echolalia	Dobbinson et al., 2003; Local and Wootton, 1995; Stribling et al., 2007; Tarplee and Barrow, 1999
Repetition and formulaicity (prefabricated language)	Dobbinson, Perkins and Boucher, 2003
Circularity	Dobbinson, Perkins and Boucher, 1998
Pragmatic difficulties	Ochs et al., 2004 etc.
Atypical socio-cultural indexicality understanding	Ochs et al., 2004
Inflexibility with response strategies	Muskett et al., 2010
Initiation of conversations for a specific purpose	Sterponi, 2004
Prosodic differences	Adams et al., 2002; Dobbinson et al., 2003; Stribling et al., 2006; Wells and Local, 2009; Wootton, 2002
Greater focus on repairing prior talk	Unknown
Interpretable as poetry	Chew, in (Ed.) Osteen, 2008
Reversal of conversational preference orders ¹⁶³	Maynard, 2005
Atypical understanding and use of figurative language (e.g., metonymy and metaphor)	Begona, 1996; Chew, 2005; Chew, in (Ed.) Osteen, 2008; Happé, 1995; Kanner, 1946; Lakoff, 1987, 1993, 2009; Lakoff and Nunez, 2000; Norbury, 2005; Nordquist, 2011; Rundblad and Annaz, 2010; Wearing, 2010
Neologisms	Ochs et al., 2004
Pronoun reversal	Ochs et al., 2004; Solomon, 2008

Table 4: Sources of potential autistic writing features

Features of autistic writing	Source(s)
Writer-based writing	Brown, 2010 (Flower, 1979)
Genre-bending	Brown, 2010
Absence of sustained narratives / randomness	Brown, 2010
Absence of fully-drawn characters	Brown, 2010
Multitudes of detail	Brown, 2010
Rich use of language (including rich symbolism)	Brown, 2010
Recurring themes of alienation and triumph over adversity	Brown, 2010
Prefabricated writing (cut-and-paste) ¹⁶⁴	Brown, 2010

¹⁶³ By 'reversal of conversational preference orders' Maynard refers to gestalt vs additive, global vs local, idiomatic vs literal, and composite vs constructive dimensions of conversational preference (Maynard, 2005).

¹⁶⁴ The 'cut and paste' technique referred to by Brown (2010) involves the technique of combining text from various sources. The term 'cut and paste' may be regarded as unduly 'technological', and its use has indeed

Metonymy	Quayson, 2010
Interest in systems	Quayson, 2010
Narrational gaps, discontinuities and abrupt topic changes	Sacks, 1995
Preference for sameness / controllability	Quayson, 2010
Type of poetry	Chew, in (Ed.) Osteen, 2008

The list of possible features of autistic talk-in-interaction and narrative writing in Tables 3 and 4 are the starting point of my review; there may well, of course, be other potential features that have not come to my attention during the literature review.

Table 3 represents an initial attempt to assess which potential features of autistic talk-in-interaction and autistic narrative writing are specific to talk, specific to writing, or of general application to both talk and writing. It is my starting point for further analysis of the various features. The lists of potential features of autistic talk and writing in Tables 3 and 4 comprise my response to RQ 1 which required identification of features of the talk and writing of autistics that are agreed upon or contested in the field or can be discovered that may reflect their autism. In what follows I aim to evaluate the evidence for each potential feature being an actual feature reflective of autism. In addition to reviewing the evidence for each potential feature listed, I shall (a) *try to determine whether a phenomenon identified as a feature of EITHER talk-in-interaction OR narrative writing might also be a feature of, or related to, an as yet unidentified feature of the other aspect of language* e.g. the issue of habitus in autistic talk has been raised by Sterponi but, as far as I am aware, has not been raised either by her, or anyone else, in connection with autistic writing. (For example, at first sight it would seem that a person's habitus – whether they are PNT or autistic – would impact on both talk and

increased markedly since the introduction of computer word processors, however, its origins are much older. Before the advent of computing technology a writer might literally cut out some words from a document (possibly using special editing scissors) and paste them into a new document. An alternative, possibly less technological, term, borrowed from an article by Wray and Perkins on the related concept of formulaicity – is *prefabricated writing* (Wray and Perkins, 2000). I shall use this latter term from now on.

writing hence this is an example of a potential feature identified in the literature in connection with one of the twin aspects of language that I shall consider in relation to the other aspect.); (b) *look for identified features of EITHER talk-in-interaction OR narrative writing that may be related to each other*¹⁶⁵ (e.g. it appears to me possible that the potential feature of talk referred to as ‘repetition and formulaicity’ may be similar to the potential narrative writing feature ‘preference for sameness / controllability’); (c) *seek to identify the possible linkages between each feature that I conclude is a strong candidate feature of either autistic talk-in-interaction and/or autistic narrative writing and the available theories of autism.*

During the literature review it occurred to me that there is a similarity between the concepts of ‘egocentric speech’ (Piaget, 1926; Vygotsky, 1986), a failure in ‘recipient design’ (Hutchby and Wooffitt, 2008) in autism, and ‘writer-based prose’ (Flower, 1979) which are therefore included in Table 5 below as having the potential to be two sides of the autistic talk and writing coin; further review of this will constitute my response to RQ 3 (“Do the apparently analogous concepts of ‘recipient design (failure of)’ and ‘writer-based prose’ help to explain autistic talk-in-interaction and autistic narrative writing?”). The evidence for and against the hypothesis in RQ4 (“Do the features of autistic talk-in-interaction and autistic writing, whatever they may be, constitute a ‘language-game’ associated with an autistic culture or ‘form of life’?”) will be left until a later chapter (Chapter X) in view of the special significance to the autistic community attaching to any conclusion that might be drawn regarding autistic communication forming a family of language-games associated with a unique autistic culture or form of life (Wittgenstein, 1958).

¹⁶⁵ All but one of the potential features of autistic talk-in-interaction and autistic writing that appear interrelated are apparently related ‘positively’ in the sense that each feature seems to affect talk and writing in a similarly positive direction; however, one possible feature – the richness of vocabulary used including symbolism – appears to be ‘negatively’ related as between talk and writing because rich use of language is only found in autistic writing. Is this finding unsound or might it reflect the extra thinking time available to writers?

Table 5: Specific features of autistic talk-in-interaction and/or writing

Talk-in-interaction	Writing
<i>Features that may affect BOTH talk AND writing (SAME DIRECTION)</i>	
Egocentric speech Recipient design failure	Writer-based writing Narrational gaps, discontinuities and abrupt topic changes
Echolalia	Prefabricated writing (cut-and-paste)
Repetition and formulaicity (prefabricated language)	Preference for sameness / controllability Prefabricated writing (cut-and-paste)
Interpretable as poetry	Type of poetry
Either provide too little or too much detail	Multitudes of detail
<i>Features that may affect BOTH talk AND writing (REVERSE DIRECTION)</i>	
Limited use of language	Rich use of language (including rich symbolism)
Atypical understanding and use of figurative language (e.g., metonymy and metaphor)	Metonymy
<i>Features that affect EITHER talk OR writing</i>	
Pragmatic difficulties (generic category)	Absence of sustained narratives / randomness
Circularity (focus on what has gone before e.g. repairing)	Absence of fully-drawn characters
Atypical socio-cultural indexicality understanding	Recurring themes of alienation and triumph over adversity
Initiation of conversations for a specific purpose	Interest in systems
Reversal of conversational preference orders	Genre-bending
Greater focus on repairing prior talk	
Prosodic differences	
Inflexibility with response strategies	
Neologisms	
Pronoun reversal	
<i>Process issues (NOT features of EITHER talk OR writing)</i>	
Scaffolding	Messy writing process

N.B. (1) By 'same direction' I mean that a feature of talk and an apparently corresponding feature of writing are both affected positively or both affected negatively whereas 'reverse direction' means that one of the two features is a positive feature and the other is a negative feature.

N. B. (2) Features apparently reflected in talk *and* writing have been centered to emphasise their connection, with left and right justified text for features apparently of talk *or* writing to reflect lack of connection.

Formulaicity

The potential for formulaicity to be a specific feature of autistic language is raised by Dobbinson et al. in their case study of six adults with autism (although only two participants are reported on, they assure their readers that they encountered formulaicity in all six individuals). Much has been written about formulaicity in language generally; for example

formulaic language use can be class-based and oral poetry traditions rely on formulae, but, as far as I can tell, the Dobbinson led study is the only study to review formulaicity specifically in autism.¹⁶⁶ It would, perhaps, have been better if these authors had discussed possible causes of formulaicity other than autism rather than just apparently assume that the formulaic language they identified in a participant was due to their autism; however, I do not doubt that the examples quoted are examples of autistic formulaicity. These authors ask themselves some interesting questions to which I have attempted an initial, tentative response as they do not respond to the questions themselves. The two questions¹⁶⁷ of relevance to an evaluation as to whether or not formulaicity is a specific feature of the talk-in-interaction of autistics that may reflect their autism are as follows. Firstly, they ask “How similar is autistic formulaicity to PNT formulaicity?”. According to Prizant, the difference may be more a matter of the *extent* of formulaicity in autism than of its nature (Prizant, 1983). Secondly, “Are both autistic and PNT formulaicity caused by the same linguistic mechanisms or some deficiency in the case of autistics?”. The model of language acquisition adopted by Dobbinson et al. – that developed by Locke involving a social cognition module (SSC) and a grammatical analysis module (GAM)¹⁶⁸ – appears to confuse the issue if one accepts Prizant’s view that a gestalt mode of processing is to the fore in autism since this seems to imply that the influence of the SSC exceeds that of the GAM *when social learning is a difficulty in autism*.

¹⁶⁶ Prizant proposes that there is a gestalt mode of cognitive processing in autism ‘in which events are remembered or retained with relatively little analysis. Linguistic utterances may or may not be part of such events’ (Prizant, 1983, p. 300). In his view this causes a preference for a ‘gestalt’ (holistic) as opposed to an ‘analytic’ (piecemeal) style of language acquisition, also that ‘It may very well be that formulaic utterances or gestalt forms result, in part, from abilities in rote memory and motor proficiency which exceed linguistic comprehension and productive linguistic abilities’ (ibid., p. 301). This may result in formulaic speech being ‘the primary means by which autistic persons approach the language acquisition process’ (ibid., p. 301).

¹⁶⁷ Dobbinson et al. also ask whether autistic language more generally is caused by the same linguistic mechanisms as with PNTs or by some specific deficiency in the case of autistics. They consider this to be the most critical question of all and one to ‘which much, if not all, linguistic research in autism orients’ (Dobbinson et al., 2003, p. 300). I agree, but at this juncture only formulaicity is under the research microscope.

¹⁶⁸ Locke’s language development model involves twin modules; a social cognition module (SSC) and a grammatical analysis module (GAM) (Locke, 1993, 1995). Dobbinson et al. write that ‘In the linguistically competent adult, both [of Locke’s, NC] modules operate in a complementary fashion, so that both formulaic and synthesized utterances are productively possible, enabling the adult to maintain fluency as well as a potentially limitless range of productivity’ (Dobbinson et al., 2003, p. 300).

Dobbinson et al. have used the framework of language acquisition developed by Locke and subsequently enhanced by Wray and Perkins (Locke, 1993, 1995; Wray and Perkins, 2000) as well as adopting the Wray and Perkins definition of formulaicity. With the thinking of Wray and Perkins clearly prominent in the Dobbinson led study, I have undertaken a detailed review of the former's paper in which they introduce what they describe as an integrated model of formulaic language¹⁶⁹. Wray and Perkins make the following comments specifically about formulaicity in autism:

In particular, the occurrence of formulaic language in the speech of ... people with autism raises some interesting issues ... a standard characterisation of autism is the absence of social-interactional skills (e.g. Prizant, 1983, p. 296), which we might expect to lead to highly *unformulaic* language. However, Prizant suggests that "the [formulaic] language patterns of autistic persons ... may reflect an inability to segment others' utterances and realize their internal structure" (p. 303), in which case, the formulaicity is not socio-interactionally motivated but rather is a 'Hobson's choice' solution to processing constraints. (Wray and Perkins, 2000, p. 23, authors' italics)

So, on the one hand, Dobbinson et al., with their comments that 'Autistic language appears to contain a high degree of formulaicity in comparison with non-autistic language' (Dobbinson et al., 2003, p. 300) and 'Far from being an aspect of autistic language which differentiates it from non-autistic language, autistic formulaicity may be seen as the *preferential use* of a normative operation' (ibid., p. 305, my italics), suggest that autistics use more formulaic language than PNTs because, apparently, it is preferred to analytic language by people with autism. On the other hand, Wray and Perkins expect autism to give rise to unformulaic language. Dobbinson et al. also write that 'Conflation of different social situations may then lead to limitation of formulaic use' (ibid., p. 306). Maybe formulaicity is preferred in autism

¹⁶⁹ The Wray and Perkins model of formulaic language is 'an attempt to account for the uses to which the individual puts formulaic language, and, specifically, what determines the choice, for that person, of a holistic or an analytic processing strategy at any given moment' (Wray and Perkins, 2000, p. 11). It is an "integrated" model in the sense of attempting to achieve a balance between holistic (formulaic) and analytic (creative) processing, but also in integrating form and function, and the developmental aspect of formulaicity.

but subject to limitations i.e., it could be made more use of by autistics but with a limited repertoire of formulaic expressions in comparison to their PNT peers.

Is formulaic language more prevalent in autism or not? The following points made by Wray and Perkins in their generic study of formulaicity appear especially germane to autism:

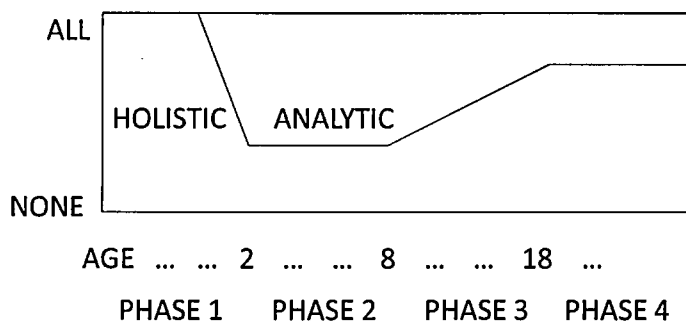
1. 'possibly as much as 70% of our adult native language may be formulaic' (Wray and Perkins, 2000, p. 2).
2. A relationship between formulaic language and metaphor whereby a formulaic form of words often carries a metaphorical meaning given the difficulty autistic people are generally considered to have with the latter (ibid.).
3. Reference to formulas being used to reduce the effort used expended in 'real-time conversation' (ibid., p. 7) given the socio-interactional difficulties in autism.
4. The two main determinants of formulaic language use versus analytic language use being 'the priorities of social interaction and the constraints of memory on our processing capabilities' (ibid., p. 12), the latter of which is also referred to as 'an over-demanding on-line processing system' (ibid., p. 17) bearing in mind that both socio-interactional and short-term memory difficulties are seen in autism. Wray and Perkins describe the determinants as two sides of the same coin because socio-interactional purposes are well served by ensuring that the people being interacted with understand what is being said which they are more likely to if the intention is being expressed in a way they have heard before (ibid.). So, as well as formulaic language making communication easier for the speaker, it also makes it easier for the hearer to comprehend which is a further benefit for the speaker (ibid.).
5. The implications of 'But "true" novelty, which plays with the boundaries of the grammar and lexicon, is poetic precisely because it pays little heed to convention – it

is the exercise of pure analysis, and consequently is difficult, challenging, and optional' (ibid., p. 12) in view of the suggestion by others of an association between autistic language and poetry.

6. Formulaic language being useful for 'ensuring that we neither become subsumed within, nor are excluded from, the social networks which we feed off emotionally, and which directly contribute to our success in finding a reproductive partner and rearing offspring' (ibid., pp. 13/14) again given the socio-interactional basis of autism.
7. According to their evaluation of the relative proportions of formulaic and analytic speech in language processing from birth to adulthood, all early speech is formulaic speech (phase 1); around the age of twenty months the child begins to develop analytic speech, which between the ages of about two and nine or ten predominates (phase 2) but is overtaken by formulaic speech which again becomes the main type of speech in the late teens and early adulthood (phase 3) (ibid.). The authors write that:

We assume, then, the early stages of the process (phases 1 and 2) to be accounted for by Locke's ... theory, whereby a specialization in social cognition, influenced by a *theory of mind*, identifies, selects and stores a sufficient and requisite number of salient formulaic linguistic items (ibid., p. 21, my italics)

Figure 1 - Relative proportions of holistic and analytic involvement in language processing from birth to adulthood (schematic representation)



(Wray and Perkins, 2000)

From these points made by Wray and Perkins it is possible to conclude, tentatively, that (a) formulaic language is a major, probably the largest, component of *all* adult speech both PNT and autistic (item 1. above refers); (b) although there may be constraints on the development of an autistic formulaic repertoire (see item 2. above) the twin demands of ensuring that communication is understood and keeping the demands on memory to a minimum (items 3., 4. and 6. above refer) may result in autistics preferring to use formulaic language in comparison to PNTs but with a limited repertoire of formulaic expressions in comparison to their PNT peers; which logically implies that autistic language will be limited to some extent relative to PNT language; and (c) the possibility that there is a limited ability in autistics (because of their socio-interactional difficulties) to develop the formulaic language before the age of two on which the later development of analytic language depends. I suggest that research in the area of formulaic and analytic speech in autism might prove productive. It is a pity that no researchers appear to have followed the lead of Dobbins et al. in studying this area. Ideally, further research should involve significantly larger numbers of participants than the Dobbins led research. I also feel that a longitudinal approach¹⁷⁰ from age two through the school-age years would be beneficial. To conclude this discussion of formulaicity in autism, I propose that the *nature and extent of their use of formulaic language* may be a specific feature of the talk-in-interaction of autistics that reflects their autism.

Quayson refers to a preference for sameness/controllability in the writing of Beckett who both he and I consider to have been autistic (Quayson, 2010) but this, of course, is just one author writing about another author. Nevertheless, in view of the autistic person's need for sameness and to exercise a degree of control in a world that may be highly chaotic for them, one can intuitively see a possible connection between sameness and controllability in autistic

¹⁷⁰ In recommending this I follow Prizant who wrote that 'To fully understand how processing styles affect the acquisition and use of language, detailed longitudinal research needs to be undertaken, following children from prelinguistic stages through the acquisition of complex and spontaneous language' (Prizant, 1983, p. 305).

writing and formulaicity in autistic talk-in-interaction. I do not consider it justifiable to make a more definitive statement than this but the matter would be worth further investigation.

Echolalia

The notion of echolalia is one of very few aspects of language that have received extensive attention by researchers in the field of autism (pragmatic difficulties have also been the subject of considerable research but there are few others). Echolalia in autistic language is 'well documented' (Dobbinson et al., 2003, p. 299). In the early years of autism research echolalia was considered to be defective speech with no intentional aspect to it and, therefore, regarded as undesirable behaviour. However, more recently, researchers have discovered an interactional purpose to some echolalic speech (e.g. Rydell and Mirenda, 1994; Schuler and Fletcher, 2002; Tarplee and Barrow, 1999; Wootton, 1999) and it is becoming increasingly clear that, far from being undesirable, it is often the best (or, sometimes, only) way of communicating a child with autism has at their disposal. The parents or carers of an autistic child need to try and interpret the messages the child is sending. I agree with Schuler and Fletcher (2002) that echolalia can be either more or less communicative and therefore can be seen at different positions on what they describe as a "continuum of communicative intent" but am firmly of the opinion that much echolalia in autism has communicative intent and is used simply because the child does not have a more creative option to hand. Is it possible that at least some echolalia produced by a child with *intellectual difficulties* (ID) is also a substitute for the more creative approach that is not always available to them too?

The only slight doubt as to the status of echolalia in autism is the possibility – raised by a study undertaken by Stribling et al. – that some examples of repetition in talk might be a reflection of 'severe learning difficulties' (Stribling et al., 2007, p. 431) rather than of autism.

These authors write that ‘repetition practices may constitute an adaptation to interacting with a *limited lexicon*’ (ibid., p. 428, my italics) – implying that a limited lexicon results from ID – although autism could also cause this. A further hypothesis is to see echolalia as an aspect of formulaic speech resulting from a preference in autism for a gestalt mode of cognitive processing (Prizant, 1983). In this case the echolalia – as a formulaic feature of language – could ‘result, in part, from abilities in rote memory and motor proficiency which exceed linguistic comprehension and productive linguistic abilities’ (ibid., p. 301) i.e., it could be an issue of *limited comprehension and production*.

Does echolalia feature in non-autistic children? An internet search on ‘echolalia’ produced 160 papers and other items whereas a search on ‘echolalia’ but excluding ‘autism’, ‘autistic’ and ‘Asperger’ only reduced the number to 109, reflecting the importance of echolalia to autism but also suggesting that echolalia is not just an autistic phenomenon. In an overview of echolalia in various disorders Wevrick points out that children develop language through imitating those around them but soon learn to creatively produce their own formulations rather than repeat the formulations of others (Wevrick, 1986). This author mentions that echolalia is often seen in autism and states that it also ‘occurs in children with ... mental retardation, receptive language delay, schizophrenia, aphasia, blindness, hearing loss and hydrocephalus’ (Wevrick, 1986, p. 25), as well as in ‘Gilles de la Tourette Syndrome, midbrain lesions, adult aphasia, and dementia’ (ibid., p. 25). There is a plethora of papers on echolalia, especially echolalia in autism, but, although written a quarter of a century ago, Wevrick’s article appears to be the most recent *overview* of echolalia unconnected to any specific disorder. Wing refers to echolalia in relation to semantic-pragmatic disorder (Wing, 1996). Of particular interest is that Attwood associates echolalia in AS with *co-existing Tourette syndrome*, the author writing that ‘There is increasing evidence that some children

and adults with autism and Asperger's Syndrome develop signs of Tourette Syndrome ... The signs fall into three major categories: motor, vocal and behavioural ... vocal disturbances included ... echolalia' (Attwood, 1998, p. 108/9). More recently, echolalia has been reported in Alzheimer's disease (Cruz, 2010), epilepsy (Linetsky et al., 2000), and Huntington's disease (Saldert and Hartelius, 2011). The common factor appears, quite clearly, to be a link with some type of disorder although why this should be the case, how one may distinguish disordered echolalic language in a young child from the imitation they use to learn language, and if echolalia in autism is due to a co-existing syndrome, are all unclear. Bowler only mentions echolalia briefly in his book on autism, referring to Kanner's mention of it and, in relation to research in autism led by Rutter, writing of 'characteristically autistic patterns of speech such as echolalia' (Bowler, 2007, p. 213). He seems clear that echolalia is a feature of autism (although I would be more confident in saying this if he had said more about it). So, the key question for me is whether echolalia is "characteristically autistic" or characteristically *associated with* autism (because of some so-existing condition)?

What, if any, connection is there between echolalia and ID? Many papers on the subject of so-called intellectual disability that refer to echolalia do so in the context of autism. Little has apparently been written on echolalia specifically in ID, however, a recently developed ID diagnostic measure – the Leicestershire Intellectual Disability Tool – makes reference to echolalia (the lowest scoring response to the question "How clear is his/her speech? How easy is it to understand?" is "Not enough spontaneous speech to rate, or only *meaningless* echolalia" (Tyrer et al., 2008, pp. 275/6, my italics). This shows that the authors of this 'tool' associate echolalia with ID although it suggests they have no regard for the possibility that echolalia may have a purpose. The Repetitive Behaviour Questionnaire used by Moss et al. to evaluate the prevalence and phenomenology of repetitive behaviour in various genetic

syndromes¹⁷¹ includes echolalia under the heading of repetitive speech (Moss et al., 2009). Hartley and Sikora's paper on the matter of which DSM-IV-TR criteria are most useful in detecting autism in children with ID does not mention echolalia (Hartley and Sikora, 2010) which may suggest that they do not see echolalia as a means of distinguishing between autism and ID.

Echolalia is a subject in its own right; unfortunately, although a fascinating topic, this is not the place to delve further into connections between echolalia and autism. Although echolalia is clearly linked to the imitation by which language is learned, and associated with conditions other than autism, for my purposes *I think it is reasonable to accept that echolalia – as reported on by many researchers over the years commencing with the pioneering Kanner (1943) – is a specific feature of the talk-in-interaction of autistics that may reflect their autism.* Whether echolalia is a feature of autism per se is a matter for others.

Prefabricated (cut-and-paste) writing

Is echolalia reflected in any way in autistic narrative writing? Brown refers to a 'cut-and-paste quality to the manuscript' (Brown, 2010, p. 17) with the authors in her study of autistic writers and with her autistic students (she teaches writing to college students with autism and AS). Brown refers specifically to the use of this technique by Hans Christian Andersen, Lewis Carroll, and Opal Whiteley. She considers that there may be a compulsion in some autistic writers to both create and destroy (this can be seen in Kafka as well). Although she feels that Carroll 'enjoyed the mental exercise and game-like process of cutting up one text to paste into another' (Brown, 2010, p. 185), and both Carroll and Whiteley cut up and reconstructed manuscripts, Andersen is said to have 'cut up letters and articles to paste into

¹⁷¹ Moss et al. refer to the Angelman, Cornelia de Lange, Cri-du-Chat, Fragile X, Prader-Willi, Lowe, and Smith-Magenis syndromes (Moss et al., 2009).

his autobiography' (ibid., p. 185) which appears to come closest to the actual use of this prefabricated writing as a means of creating a piece of text i.e., a writing technique. It is in Brown's noting of the use of a prefabricated writing technique by her autistic students that the possibility of this being a technique associated with autism comes across most strongly. On a personal note, I have worked with an adult with AS – specifically to assist him in producing written documents – who constantly used prefabricated writing, indeed, I cannot recall any document that he produced that did not include text from a textbook or some other source (and he would 'correct' my work for him by introducing, usually irrelevant, text). It is also possible that the, arguably, excessive use of literary references and allusions¹⁷² to other author's writing (Beckett and Carroll come to mind) and the use of an earlier author's plot template (e.g. Homer's 'Odyssey' was used by Joyce as a template for 'Ulysses') may be a sophisticated form of prefabricated writing. In conclusion, *there is sufficient evidence in my view that prefabricated writing may be a specific feature of the writing of some autistics that may reflect their autism.* Further research is needed to form a more definitive view.

Are echolalia and prefabricated writing two sides of the same coin i.e., is there an element of commonality in this respect between autistic talk and autistic writing? Although there is repetition in prefabricated writing which may suggest a connection, I suspect that the link is too tenuous to be sustained; certainly there is no evidence to support a connection between them. My own view is that, whereas echolalia results from difficulty in understanding spoken language; as Brown writes, prefabricated writing is used to assist creative writing because persons with autism 'often struggle with the process of synthesis' (Brown, 2010, p. 17). I do not see a direct connection between echolalia and prefabricated writing.

¹⁷² Whilst use of literary references and allusions is part of the age old language-game of literature I argue that an apparently excessive, almost obsessional, use of them is a possible departure from this language-game.

Circularity

In reporting on their study of structural patterns in the conversation of a woman with autism,

Dobbinson, Perkins and Boucher write that:

To make sense of the data, we should first look at the theme of *circularity* in Mary's talk. There is an implicit importance given to the precedence of linear construction in the talk of people who do not have autism which is reflected in the concentration of CA practitioners on sequential organization ... Conversational interaction is seen as a progressive phenomenon. *Mary's conversation, however, seems to focus not only on what is to come but what has already taken place.* Her preferential return to earlier topics within a conversation as well as her preference for favored topics cross-conversationally, are a clear indicator that *she relies heavily on what has come before in structuring her present talk.*

(Dobbinson, Perkins and Boucher, 1998, p. 127, my italics)

It would clearly be stretching the bounds of credulity to breaking point to suggest that something is a specific feature of autistic talk-in-interaction on the basis of an analysis of just one individual's talk, particularly as the authors of the relevant paper only refer to the matter briefly, however, the feature identified by Dobbinson, Perkins and Boucher, although a fleeting reference, is intuitively what one might expect of autistic conversation because such conversation is likely to require more regular repair of preceding talk than would be the case for conversation between typically developing people. The authors mention that their participant, Mary, often overlaps another speaker to repair, and hence complete, talk in a previous turn of hers. They considered whether the regularity of her need to repair earlier turns might be due to difficulties in processing talk sufficiently quickly for her to keep pace with conversation (excessive demands on memory for example) but, having identified overlaps where Mary had clearly fully understood the prior turn, rejected this hypothesis. Their investigation of Mary's overlaps suggested that she does not actually see them as overlaps because 'her intention is not to take over (the current) speaking turn to make a new contribution, but to revise an earlier contribution. Thus, Mary's use of overlap indicates that

she looks backwards in the conversation as well as forwards' (Dobbinson, Perkins and Boucher, 1998, p. 122, my italics). In the opinion of these authors, this type of overlap is not a matter of Mary disregarding her conversational partner's right to complete their turn because she prioritises repair of her own prior turn over the other speaker's right to complete their turn when she has not completed the turn to which they are responding (ibid.).

Is Mary's bi-directional conversational gaze required due to a regular need for repair of her prior turns? Is this a feature of autistic conversation more generally? Is it possible that prioritisation by an autistic speaker of the repair of their prior turn over the completion of a conversational partner's (immediately?) following turn is a specific variation from the SSJ talk-in-interaction schema? And is it also possible there are other departures from this schema in autistic conversation which, when considered in their totality, may be sufficient to constitute a specific variant of the standard SSJ schema?

It is not possible to respond to such questions in the absence of a detailed analysis of autistic talk-in-interaction undertaken in naturalistic settings. I simply put these propositions forward for consideration by others because I believe they deserve to be studied in depth.

I am unaware of aspects of autistic writing that may 'match' circularity in autistic talk.

Atypical socio-cultural indexicality understanding

As I wrote earlier, Maynard and Peräkylä consider that Wittgenstein's form of life concept can solve the problem of determining how people understand indexical expressions through developing 'orderly linguistic practice' (Maynard and Peräkylä, 2003, p. 245). I have also agreed with Ochs et al. that there is more to the social deficits in autism than a failure to fully

develop so-called ToM, believing that it is also critical for a child to develop socio-cultural acumen, including an ability to understand indexicality (Ochs et al., 2004). Ochs et al. write as follows about an ability to understand indexical meanings:

indexical sense-making relies upon members' knowledge of conventional associations between entities in social contexts. Full participation as a member of a community entails understanding how particular forms of behavior, appearance, artifacts, and the built environment historically and conventionally index what larger practices, identities, dispositions, and institutions are at stake at some moment in time and space.
(Ochs et al., 2004, p. 166)

In their paper Ochs et al. quote examples of the failure of a child with autism to understand the socio-cultural implication of a particular piece of naturalistic talk-in-interaction. One excellent example is a failure by a 10 year old high-functioning child – Don – with autism to understand indexical gestures, in this case a character in a scene stretching his arms wide and grimacing on the crowing of a rooster. The relevant piece of CA is included as item 1 in Appendix B. As the authors point out, Don cannot understand the significance of the gestures until his mother explains them to him by breaking them down into their constituent parts and providing him with the character's psychological disposition at the time. Ochs et al. suggest that socio-cultural indexicality presents problems of interpretation to autistic individuals under five headings:

1. Simply recognising that an expression or gesture (sign) is indexical is not easy;
2. Recognising an indexical sign at conversational speed requires some rapid guesswork that places even more of a demand on processing capacity;
3. Even if a sign is recognised as being indexical, it may index more than one immediate context thus requiring a quick decision as to which context is being indexed;

4. Even if the correct immediate context is understood, that context may, in turn, index a further context once removed e.g., a sign may index a particular disposition or act which, in turn, indexes an activity, identity or institution;
5. Successful interpretation of indexical signs requires “part-whole inferencing” which, if the WCC hypothesis is correct, will be a problem for autistics (Ochs et al., 2004).

Clearly, the fathoming of indexical signs is a highly complex business and it would not be surprising if the ability of autistic individuals to understand such signs was compromised as shown in the example of the child Don in conversation with his mother. From their study, Ochs et al. have concluded that children with autism are able to understand indexicals to some extent ‘but that they have problems discerning which particular indexical relations are most saliently foregrounded as relevant, given the focal situation at hand’ (ibid., p. 171). Here again, there is precious little evidence in support of a hypothesis that an atypical understanding of socio-cultural indexicality is a specific feature of the talk-in-interaction of autistics that may reflect their autism albeit it is intuitively the case that such a hypothesis ‘fits the facts’ of autism for those who have immersed themselves in the subject. I consider the matter warrants extensive further research building upon the work of Ochs et al.

I am not aware of any aspects of autistic writing that have the potential to ‘match’ the matter of difficulty in understanding socio-cultural indexicality in autistic talk-in-interaction but this may simply be a reflection of the fact that any problems in understanding indexicality there may be would be largely due to the speed at which talk-in-interaction usually takes place, an issue that, of course, is absent in the case of writing. However, if a failure to fully develop, or a delay in fully developing, a child’s habitus (or Background) is a contributory factor in a difficulty in understanding socio-cultural indexicality then one would expect such difficulties

to reduce with age and for the child to ‘fill in some of the gaps’ in their childhood habitus so that their adult habitus more nearly approximates that of their PNT peers. This is a further situation requiring longitudinal review to understand any developmental trajectory.

Inflexible response strategies

Muskett et al. argue that their analysis of inflexibility as an interactional phenomenon in autism suggests that the child in their study only ‘*appears to behave inflexibly*’ (Muskett et al., 2010, p. 3, author’s italics) because the researcher, unintentionally, keeps handing back control of the conversation to the child. They conclude their article by expressing a view that direct causation models of autism ‘symptoms’ fail to take account of ‘the contingent, dynamic, and emergent product of (the child’s) behavior, the behavior of co-speakers, the interpretation of (the autistic child’s) behavior by co-speakers, the local context in which this occurs, and the normative expectations that are associated with that context’ (ibid., p. 14), advocating the use of CA to try and resolve these complicated and multi-faceted issues. A single example produced in a case study of one child hardly counts as evidence of this being a specific feature of the talk-in-interaction of autistics that may reflect their autism (or, in this case, of it apparently *not* being a specific feature). Intuitively, given that inflexibility is an issue in autism more generally (the existence of restricted, repetitive, and stereotyped patterns of behaviour is an aspect of the diagnostic criteria, and, from a conversational perspective, ‘lack of reciprocity in conversational interchange’ (Bogdashina, 2005, p. 170) and the noted tendency of autistic people to initiate conversations for a specific purpose are redolent of inflexibility, it would seem that the Muskett et al. example may have been a function of the particular circumstances of their study. I shall say no more about this topic.

Initiation of conversations for a specific purpose

Rendle-Short draws attention to a finding that on occasion, when the AS child in her study had asked a question and received an answer, the ‘conversation falters (and) it is as if having received her answer to the question ... she has no reason for further talk’ (Rendle-Short, 2003, pp. 175/176).

As mentioned previously, many persons with AS initiate conversations for a specific purpose and may not be interested in undertaking any talk during their conversations unconnected with that purpose. Rendle-Short suggests that it may be because autistic people see no reason for further talk once their immediate need has been satisfied. If correct, this would imply that many persons with autism may not understand the social nature and purposes of talk-in-interaction; that it is not just to enable requests to be made, questions to be asked and so on but that it has the underlying, deeply social purpose of building social relationships.

Naturally, one would not expect any person to be aware of the purpose of talk-in-interaction on a scientific level unless they had studied the subject, but members of the PNT are, at some level, well aware that talk-in-interaction does not have to be for a specific purpose; that ‘small talk’ is a means by which a person can learn about their significant others, build friendships, and generally become a competent member of a social group (even, if asked, they would not describe it as such). This can be seen to correspond with Bogdashina’s noting of a ‘Lack of understanding that language is a tool for communication’ (Bogdashina, 2005, p. 170) as an implication of the current diagnostic criteria for autism. As such it is clearly a specific feature of the talk-in-interaction of autistics that may reflect their autism.

Atypical understanding and use of figurative language

Right from the very beginning of research into autism Kanner referred to the use of metaphor by some of the children he was reporting on e.g., in the reference to his patient, Paul G., whose use of idiosyncratic – but metaphorical – language use has already been discussed (see pages 152-153). (Kanner, 1943) Kanner clearly regarded what he described as seemingly ‘irrelevant and metaphorical language’ (Kanner, 1946, p. 242) as sufficiently important to justify dedicating his second paper on autism, written in 1946, to the subject. In this paper he proposed the following conclusions drawn from his observations:

1. The seemingly irrelevant and nonsensical utterances of our autistic children are metaphorical expressions in the sense that they represent ‘figures of speech by means of which one thing is put for another which it only resembles’. The Greek word *metapherein* means ‘to transfer’.
2. The transfer of meaning is accomplished in a variety of ways;
 - a. Through substitutive analogy: ...
 - b. Through generalization: ...
 - c. Through restriction: ...
3. The linguistic processes through which the transfers are achieved do not as such differ essentially from poetical and ordinary phraseological metaphors. Etymologically, much of our language is made up of similar transfers of meaning through substitutions, generalizations and restrictions.
4. The basic difference consists of the autistic privacy and original uniqueness of the transfers, derived from the children’s situational and emotional experiences. Once the connection between experience and metaphorical utterance is established, and only then, does the child’s language become meaningful. The goal of the transfer is intelligible only in terms of its source.
5. In contrast to poetry and etymology, the metaphorical language in early infantile autism is not directly communicable. It is not primarily intended as a means of inviting other people to understand and to share the child’s symbols. Though it is undoubtedly creative, the creation is in the main self-sufficient and self-contained.

(*ibid.*, p. 244)

Kanner’s observations on metaphorical language in autism are insightful and evocative of autistic language use. One can pick out, as particularly interesting points, his references to autistic aloneness (“privacy”), the derivation of metaphors that has to do with autistic

aloneness, the failure to design utterances to enable a recipient to understand them, and the contrast with poetry (Kanner, 1946). Ever since, many authors have written on the subject of understanding and use of figurative language in autism, investigating other areas of language such as irony and humour and, more recently, metonymy (e.g., Begona, 1996; Chew, in (Ed.) Osteen, 2008; Happé, 1995; Lakoff, 1987, 1993, 2009; Lakoff and Nunez, 2000; Norbury, 2005; Nordquist, 2011; Rundblad and Annaz, 2010; Wearing, 2010). There is no space with which to provide a summary of the findings of these researchers (and all the others) but, on the basis of Kanner's findings alone, one can reliably conclude that atypical use of figurative language is a specific feature of the talk-in-interaction of autistic that may reflect their autism although as he wrote 'the autistic speaker, in making his own language ... may employ the same principles of linguistic and semantic change as does the normal (sic) person' (Kanner, 1946, p. 244/245)¹⁷³. In other words, the process used by autistic people is, probably, exactly the same as that used by the PNT but of a more personal nature given the isolation of a person with autism. Kanner's finding that metaphorical language in autism is often of a personal nature, unlike the PNT, does make one wonder whether the tendency for some autistic authors to use unusual metaphorical language is linked to their autism rather than simply being an aspect of their literary creativity (although it could be that too).

The Rundblad and Annaz research into metaphor and metonymy comprehension in autistic children is, so far as I can tell, the first study to investigate this. The authors point out that previous studies have largely concentrated on comprehension of metaphor and irony in autism whereas their study focused in particular on the neglected subject of metonymy. Rundblad and Annaz demonstrate that a difficulty in understanding both metaphor and

¹⁷³ With regard to Kanner's point that autistic speakers may use the same linguistic processes as PNT speakers, Despert, in her response to Kanner's paper, writes that 'Dr. Kanner, in his careful observation and analysis of the semantics of autistic children, has indicated that the transfer of meaning is accomplished through substitutive analogy, generalization and restriction. It must be stressed that these mechanisms are all operating in the course of language development in the young normal (sic) child' (Despert, 1946, p. 245).

metonymy appears to be a specific feature of the talk-in-interaction of young autistics that may reflect their autism. However, this study was undertaken along quantitative lines and could be complemented, and potentially reinforced, by a conversation analytic study of the use of metaphor and metonymy in the naturalistic talk-in-interaction of autistics.

One cannot draw any firm conclusions from Quayson's fascinating study of metonymy in Beckett's *Murphy* except, perhaps, to tentatively suggest that there may be high-functioning people with autism who are able, not only to understand and use metaphor and metonymy in the manner of typically developing people, but who actually have a *special facility* for using such language. Could this be due to such persons having a special interest in language? Did each and every autistic author reviewed in this paper have such a special interest?

Prosodic differences

Conversation analysts have not focused their attention on prosody (or 'tone of voice') in autism, although, not surprisingly, it has been mentioned by some as a feature of autism (e.g. Delves and Stirling, 2009; Dobbins et al., 2003; McCann and Peppé, 2003; Stribling et al., 2006; Wootton, 2002). McCann and Peppé write, as do other authors about other important aspects of autism, that despite many autistic individuals presenting with unusual prosody 'prosodic ability in autism spectrum disorders is often perceived as an under-researched area' (McCann and Peppé, 2003, p. 325). In their review of the literature in this area McCann and Peppé sought to determine whether autism involves a disorder of prosody, if it was possible to generalise about any prosodic disabilities that can be discovered, and if the nature of the diagnosis affects the nature of any prosodic disability there may be (ibid.). Unfortunately, the exercise proved somewhat futile as 'Findings conflict and methodology varies greatly' (ibid., p. 325); indeed, they concluded that the methodologies were so discrepant as to prevent them

from drawing any conclusions about possible differences in atypicality of prosody between the various different diagnoses. McCann and Peppé found no studies of expressive ability and hence were unable to make any comparison between expressive ability and receptive ability. They concluded their paper by explaining that the issue of prosody in autism is important because expressive difficulties may make it difficult for autistic people to gain acceptance socially, and receptive difficulties could be a factor in the problem of understanding other minds, in addition to being an issue with language comprehension. Here is another important area of autism that has not been fully explored by the research community.

Some studies of prosody in autism have been carried out since McCann and Peppé undertook their literature review. Paul and her colleagues attempted 'to address some of the shortcomings of the earlier literature on prosody in ASD' (Paul et al., 2005, p. 215), however, they drew attention to various methodological issues with their work, of which one of the most important was the absence of a control group of individuals without autism since 'using non-ASD contrast groups would extend our understanding of the role of prosody in this and other disorders. Several studies have shown, for example, that children with specific language disorders ... and mental retardation ... also exhibit prosodic deficits' (ibid., p. 215) so that it remains unclear as to the extent to which prosodic difference is or is not specific to autism. McCann and Peppé (with others) returned to the matter of prosody a couple of years after carrying out their literature review. Their conclusions demonstrated that it is still not known whether prosodic difficulties in autism are specific to autism (there are similarities between the prosodic differences in autism and specific language impairment (SLI)).

The results of this study show that prosody relates closely to language, with receptive skills having the greatest relationship. More research is needed to clarify whether prosodic impairments are a direct result of language impairments, or vice versa, or an autism-specific difficulty relating to some

other factor. The language skills of children with HFA are very heterogeneous, but most children show major difficulties. This difficulty is particularly severe for expressive language with the majority of children scoring more than two standard deviations below the mean. The language profile is independent of non-verbal ability and various parallels can be drawn with the similar profiles shown by children with SLI.
(McCann et al., 2007, p. 699)

Diehl et al. investigated prosody processing (comprehension) in high-functioning children with autism '(adapting) a psycholinguistic paradigm to examine whether individuals with autism are able to use prosody to resolve syntactically ambiguous sentences' (Diehl et al. 2008, p. 144) and including a control group of typically developing controls matched on suitable variables. They found that 'adolescents with HFA have difficulty using prosody to disambiguate syntax in comparison to typically developing controls, even when matched on chronological age, IQ, and receptive language' (ibid., p. 144). However, the experiments undertaken by Grossman et al. with HFA children and a typically developing (TD) control group resulted in a conclusion that 'Children with HFA were *as capable as their TD peers in receptive* tasks of lexical stress and affective prosody. Prosody productions were atypically long, despite accurate differentiation of lexical stress patterns' (Grossman et al., 2010, p. 778, my italics). Grossman et al. drew attention to various inconsistencies with the results of the 2007 McCann study¹⁷⁴ previously referred to (and to a study led by Peppé), writing that 'data suggest that the *added complexity and prosodic information* of sentences may assist participants with HFA with the decoding of affective prosody' (ibid., p. 783, my italics); a counter-intuitive finding for those researchers who have expressed surprise at the abilities often shown by high-functioning persons with autism. The most recent published study of

¹⁷⁴ Grossman et al. also drew attention to various methodological differences between their study and those of McCann et al. and Peppé et al. such as the nature of prosodic cues used, and participant age differences. They also mentioned the issue of small sample sizes in various studies of prosody in autism.

prosody in autism is from Peppé and colleagues who, this time, compared separate groups of children with HFA and AS with a typically functioning control group concluding that:

The HFA group showed impairment relative to age-matched controls on all the prosody tasks assessed (affect, sentence-type, contrastive stress, phrasing and imitation) while the AS [group, NC] showed impairment only on phrasing and imitation ... Impairment in prosodic skills may therefore be a reliable indicator of autism spectrum subgroups, at least as far as communicative functioning is concerned.

(Peppé et al., 2011, p. 41)

Although the issue of specificity of prosodic differences to autism – or to subgroups on the autism spectrum – remains to be determined, there now appears to be sufficient evidence to conclude that there are differences between prosody in high-functioning children with classic autism on the one hand and AS on the other; indeed, Peppé et al. go on to state that ‘since there appeared to be some prosodic impairment independent of language ability, it is possible that atypical prosody might be a contributing diagnostic factor in ASC’ (ibid., p. 51). In consequence they call for prosody to be embedded within the criteria used for diagnostic purposes (presumably, as one means of distinguishing between HFA and AS) in addition to recommending that the relationship between prosody and language skills in autism be investigated further. Peppé et al. do not have sufficient evidence to draw any conclusion as to whether or not the differences they observed between their HFA and AS participants have a linguistic cause or are due to other factors, giving the example of ToM (ibid.), and writing that if language impairment was the only cause of these differences ‘then we would expect other children with language disorders, e.g. specific language impairment (SLI), to show prosodic impairments; but atypical expressive prosody is not usually observed as a feature of specific language impairment’ (ibid., p. 51). However, as already mentioned, McCann et al. have drawn attention to prosodic similarities between autism and SLI (McCann, 2007).

A considerable amount of valuable research has been undertaken into prosody in autism since McCann and Peppé wrote – only eight years ago – that this subject is an under-researched area (McCann and Peppé, 2003). Nevertheless, the inconsistencies and conflicts referred to by various authors (e.g. Grossman et al., 2010; McCann and Peppé, 2003) appear to remain and, whilst there now appears to be some support from the literature on prosody in autism for a view that there are prosodic differences between HFA and AS, differences between subgroups on the autism spectrum may be as likely to be due to language difficulties as to autism itself. This would seem to be consistent with Boucher's claim that autism may involve *varying levels of difficulty* in understanding conversation exchanges (or signing) in real time 'which contributes to the linguistic aspects of their pragmatic impairment' (Boucher, 2003, p. 250, my italics) with the extent of difficulty in parsing conversation *dependent on where an individual lies on the autism spectrum* but with the fundamental deficit in all cases being a difficulty in 'processing transient, sequential stimuli, i.e. stimuli with a temporal dimension, such as speech or manual signing' (ibid., p. 250).

Prosody was identified as a feature of autism by Kanner (1943). Although many authors have drawn attention to the prosodic differences between autistic people and their PNT peers, it is only possible to conclude that prosodic differences seen in autism are specific features of the talk-in-interaction of autistics that *may* reflect their autism i.e., prosodic differences are specific features of autism but may be linguistic in nature, perhaps along the lines of the time-parsing difficulty in autism suggested by Boucher (Boucher, 2003). It would seem unlikely that prosodic differences in autistic talk-in-interaction can be reflected in their writing as prosody is a specific feature of verbal speech.

Greater focus on repairing prior talk

Dobbinson, Perkins and Boucher (1998) have written that the turns at talk of some children with autism may be focused to a far greater extent on the repair of their own prior turns at talk than on responding to the immediately prior turn at talk of their conversational partner than is the case with typically developing children. I have found only one reference to this possible phenomenon so there is absolutely no justification for suggesting that a focus on repairing prior turns when conversational rules would normally require a response to the conversational partner's turn, and a repair 'ignores' the partner's turn, is a specific feature of autistic talk-in-interaction that may reflect their autism. However, because they are more likely to make conversational errors it is also intuitively likely that autistics will have to engage in more conversational repair. Whilst a PNT individual might be as likely to ignore the error (if it is not too crucial to the conversational flow), or wait until an opportunity to repair the error is presented, I think it quite possible that an autistic person might often want to correct the mistake immediately and feel uncomfortable unless and until the mistake has been corrected. It would not surprise me, therefore, if there is a tendency for autistics to focus on repairing their own prior turn at talk in preference to responding to the immediately prior turn. It would be worth investigating this 'phenomenon' if an opportunity arises.

Interpretable as poetry

In her article on the poetics of ordinary talk, Gail Jefferson compares the production of the 'wonderful mixtures of sounds and meanings [that] are the provenance of poets who make it their business to work out, to seek, to really endeavor to find just the right word' (Jefferson, 1996, p. 4) with the accidental poetics associated with what she calls pathological activity, quoting Woods (who investigated language in schizophrenia) who wrote that 'The patient

progresses from one . . . word to another by *associations* determined by similarities in sound, category or phrase' (Woods, cited in Jefferson, 1996, p. 4, my italics). Woods then writes:

there is probably nothing pathological about [it] as a purely subjective phenomenon. Introspective observation will verify that we are prone to [do it] . . . What is pathological is the tendency to incorporate such *autistic productions* without any endeavor to translate them into a form which considers the *needs of a listener*.
(*ibid.*, p. 4, my italics)

Jefferson suggests that, in writing of "the needs of a listener," Woods may have had some insight into what conversation analysts refer to as "recipient design" which is a specific, and central, feature of talk-in-interaction. As he was writing in 1938, Woods' mention of "autistic" predated the pioneering papers from Asperger and Kanner and was therefore, presumably, being used in the Bleulerian sense. I am of the opinion, particularly in view of his mention of "associations" (a means of constructing talk seen in autism¹⁷⁵), and failure to consider the "needs of a listener" (an autistic trait), and Jefferson's reference to "recipient design" (another autistic trait), that this warrants review. I shall not do so now but as part of my review of recipient design and writer-based prose featuring later on in this thesis.

Various authors have proposed an association between autistic language and poetry (Baron, 2008; Chew, 2005; Chew, in (Ed.) Osteen, 2008; Roth, 2008a; Roth, 2008b). Roth suggests that 'while the empathetic or secondary imagination may be impaired in autism there is plentiful evidence to suggest that the creativity of the primary imagination is not' (Roth, 2008b, p. 18).¹⁷⁶

¹⁷⁵ My original draft of the wording in brackets was "a means of constructing talk *associated with* autism" which, given that it refers back to the immediately prior mention of associational thinking in autism, may be an example of natural poetics. I was tempted to leave it in but it would have jarred with "associations"!

¹⁷⁶ This is a reference to Coleridge's theory of imagination. Hume writes that 'Coleridge's distinction between primary and secondary Imagination might properly be made in Kant's system between cognitive Imagination and creative or aesthetic Imagination' (Hume, 1970, p. 489). He adds that 'The key point of Coleridge's definitions is that they free one kind of Imagination [primary imagination, NC] from examination and

Chew is the author who, in my view, has the most to say about ‘the poetic qualities of the language of autistic persons and of autism itself *as* poetry’ (Chew, 2005, p. 1). In her commentary on Jessy Park (who is autistic), and the work of the poets Tito Rajarshi Mukhopadhyay (also autistic) and Gerard Manley Hopkins, Chew writes that:

The language of autistic persons can be understood by reading their words and writing as one does poetry; further, literary terminology used to analyze poetry can assist us in understanding the verbal and non-verbal utterances of autistic individuals. To understand or interpret an autistic individuals’ (sic) language another person must be able to read metonymically ... What seems metonymical and arbitrary to a non-cognitively disabled reader is “metaphorical” and true to an individual with a cognitive disability ... (ibid., p. 1)

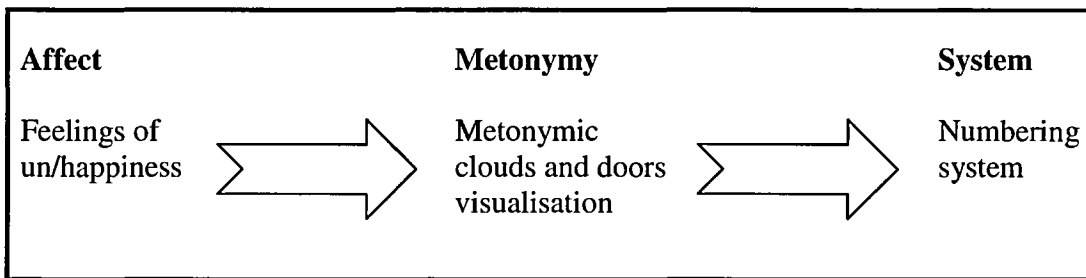
The link between autism and metonymy has been made by other scholars (Quayson, 2010; Runblad and Annaz, 2010) and been touched upon before in this thesis. Chew describes the metonymical (also sensory based and systematic) approach the autistic Jessy Park uses to produce her own unique descriptive language. For example, Park¹⁷⁷ has a system for expressing un/happiness involving particular numbers of clouds and doors (the more clouds there are and the fewer doors the more unhappy she is and vice versa). The origin of this numbering system linked to clouds and doors is, apparently, partly due to the pleasure Park feels when it is a cloudless day (and her dislike of days with no blue sky) and, although the derivation of the door aspect is less clear, it may be that Park associates closed doors with ‘protection ... to keep out unwanted stimuli’ (Chew, 2005, p. 2). Chew writes of systems of ‘metonymic correlations between numbers and concrete phenomena that (Park) uses to

development by the intellectual faculties. Thus his view of the mind would be schematized: Sensibility -> primary Imagination -> Intellect -> secondary Imagination. The secondary Imagination operates on the material of our rational world-cognitive concepts’ (ibid., p. 490). Assuming, of course, that this is correct, and given Roth’s point that “the creativity of the primary imagination is not (impaired)” (Roth, 2008b, p. 18) I am left wondering why secondary imagination would be impaired in an average to high-functioning autistic person.

¹⁷⁷ Chew refers to the autistic Jessy Park throughout as Jessy and to her mother as Clara Claiborne Park when first referred to, shortened to Park thereafter. Even if it had been necessary to refer to Jessy’s mother (which it has not been) this is the one and only time I shall call her daughter Jessy. It will be Park from now on.

explain the world to herself and herself to the world' (ibid., p. 2) and that 'All of these systems draw on concrete stimuli – food, clouds – that often provide a strong effect on the senses' (ibid., p. 3). There appears to be a *sensory related* metonymic language system in use here which might be set out visually as follows (see Figure 2),

Figure 2: Jessy Park's sensory related metonymic language system (un/happiness)



Through translation of a system such as the one visualised at Figure 2 above, 'we *can* begin to understand the meaning an autistic person whose linguistic ability may be severely limited and whose neurological writing¹⁷⁸ (sic) fosters an unusual ... use of language itself' (ibid., p. 3, author's italics). If Chew is correct, are sensory related metonymic language systems in operation across the autism spectrum or only where "linguistic ability (is) severely limited"?

In discussing Mukhopadhyay's poetry, which she sees as 'metonymical in its reliance on the observation of chance occurrences that are elevated to truth' (ibid., p. 6), Chew writes that 'what is particularly exceptional about [Mukhopadhyay's writing, NC] is his idiom. Mukhopadhyay's use of language provides clues to his way of thinking just as Jessy Park's more limited verbalizations and systems of correlations do' (ibid., p. 5). Indeed, Chew considers that 'A theory about how poetic language works – *through metonymy when metaphor is expected* – can assist us in understanding Mukhopadhyay's thinking, in

¹⁷⁸ Presumably Chew meant to refer to "neurological *wiring*", not "writing".

understanding, perhaps, how an autistic person perceives the world' (ibid., p. 6, my italics). This is a fascinating thought and, although, for me, the jury is still out on these ideas, I agree with Chew that more effort should be made to listen to autistic people who have difficulty communicating and that carers should never just assume that what may sound nonsensical actually is nonsensical (ibid.). The issue of whether metonymy holds a special place in autism has already been considered (see pages 157-159). There is insufficient evidence that being interpretable as poetry is a specific feature of autistic talk-in-interaction.

Reversal in conversational preference orders

In his paper on lessons learned from and about autism from social actions, gestalt coherence and designations of disability, Maynard includes a section entitled 'Autistic Intelligence as a Reversal in Conversational Preference Orders' from which one may suppose that he regards "autistic intelligence" (whatever that may be) as simply involving reversal of ordinary conversational preference orders, no more, no less. It is difficult to see how the concepts of 'autistic intelligence' and 'reversal of conversational preference orders' can be equated; surely there must be more to intelligence than simply following PNT orders of preference in conversation?¹⁷⁹ However, elsewhere in his paper Maynard has this to say:

It will pay to reconsider the suggestion that *autistic intelligence is a departure from commonsense reasoning* because it represents a disturbance in the ability to form central or global coherence across a wide range of stimuli (Frith, 1989, 2003).
(ibid., p. 518)

¹⁷⁹ I review Maynard's references to autistic intelligence under the heading 'Reversal of conversational preference orders' as, even if the reversal of such orders of preference is accepted as a specific feature of autistic talk-in-interaction reflecting autism, it can hardly, in my view, be sufficient to warrant use of the term autistic intelligence. In any case, use of such a term could be perceived as 'downgrading' the intelligence of autistics and, whilst sure Maynard did not intend this, I do not wish to perpetuate potentially derogatory terms.

So, it would seem that, rather than Maynard's concept of autistic intelligence solely involving a reversal of preference in conversation, this concept consists of a "departure from commonsense reasoning" as well as a reversal of conversational preference orders (what else might he regard as components of autistic intelligence?). This still isn't good enough in my view, particularly as Frith and Happé now regard local processing in autism as a cognitive preference that does not necessarily involve any weakness in global processing. How, I wonder, does Maynard define "commonsense reasoning"? Is he making reference to the sometimes illogical (to an autistic mind) PNT mode of thinking rather than the sometimes more logical mode of thinking associated with autism?! To contrast commonsense and so-called autistic intelligence is objectionable or, rather, would be if it made any sense.

After this slight (but necessary) digression to confront some terminology used by Maynard, I now review his views on differences between autistics and PNTs in relation to their use of composite and constructive understandings. The differences between these types of conversational understandings are described by Maynard (with Sacks) as follows:

Conversation analysts draw this contrast between constructive and composite understandings of utterances. Sacks (1989), examining the use of "may I help you," has stated that such an utterance is a constructive when it is "understood by taking the pieces and adding them up in some way" (pp. 222–23). As a constructive, the phrase can be interpreted literally with its sense built from the utterance parts as a question about the recipient's state of knowledge. Thereby, the question can obtain an answer such as "I don't know." As a composite whose sense is not reducible to its parts, on the other hand, *may I help you* is a "piece of etiquette" and works idiomatically as a way for its speaker (in a store, for example) to announce the kind of setting the recipient has entered. (ibid., p. 518, author's italics)

Maynard regards these different types of understanding observed in ordinary conversation as one way in which 'commonsense' and 'autistic intelligence' can be distinguished – his full

typology of the two proposed types of intelligence (derived from a fascinating analysis of responses to ‘What Do You Do When (WDYDW)’ questions) are set out in Table 6 below.

Table 6: Maynard’s Types of Intelligence/Understanding

<i>Types of Intelligence/Understanding</i>	
<i>Commonsense</i>	<i>Autistic</i>
Gestalt	Additive or stimulus bound
Global	Local
Idiomatic	Literal
Composite	Constructive

Source: Maynard, 2005, p. 519

In Maynard’s typology autistic people are considered to have a tendency to use constructive understandings and their PNT peers to use composite understandings¹⁸⁰. He describes some of the differences between responses from an autistic person and those from a PNT person as ‘subtle’ (ibid., p. 516) ‘Yet ... it is remarkable how noticeable, if not jarring, the autistically intelligent answers can be; they “miss the gist” and have a “subtle ‘off’ quality”’ (ibid., p. 516). Later on, Maynard writes that: ‘Consistent with the autism literature, which purports the wide diversity and the idiosyncrasies of autistic intelligence, we can see that departures from commonsense may vary along a continuum’ (ibid., p. 517). It is not entirely clear from this whether Maynard is suggesting that a continuum spans commonsense and so-called autistic intelligence or, alternatively, if the continuum is restricted to autism. His reference to ‘the autism literature’ might imply the latter as does his comment that ‘it might pay to investigate this continuum rather than (treat) unacceptable answers as univocally irrelevant, inappropriate, or incorrect’ (ibid., p. 517). If there is a difference in cognition between autism and the PNT why would a continuum span both? However, if Maynard’s typology is focused on *conversational understandings* rather than types of intelligence, and is *divided between the PNT and autism* (rather than being considered a continuum), Table 7 below emerges.

¹⁸⁰ The other autistic elements of Maynard’s autistic intelligence/commonsense typology appear to fit well with the outcome of research into autism e.g. preference for local rather than global processing.

Table 7: Types of Conversational Understanding

<i>Conversational Understanding Types (Tendencies)</i>	
<i>Predominant Neurotype</i>	<i>Autistic Neurotype</i>
Gestalt	Additive or stimulus bound
Global	Local
Idiomatic	Literal
Composite	Constructive

Based on: Maynard, 2005, p. 519

Speaker-based speech and writer-based writing

Under this heading I shall deal with the apparently related concepts in talk-in-interaction of egocentric speech (Piaget, Vygotsky) and recipient design failure (Hutchby and Wooffitt), considered under the heading of speaker-based speech (Hutchby and Wooffitt, 2008; Piaget, 1923; Vygotsky, 1934), as well as the, again apparently related, concepts of the tendency to egocentricity in writing (Quayson) and writer-based writing (Brown, Flower), considered under the heading of writer-based writing (Brown, 2010; Flower, 1979; Quayson, 2010).

In view of the complexity of this part of the review, before commencing to define each of the various elements of the review, I have included below (as Table 8), for ease of reference, an extract from Table 5 setting out possible features of autistic talk-in-interaction and writing.

Table 8: Extract from table of specific features of autistic talk-in-interaction and writing

Talk-in-interaction	Writing
<i>Features that may affect BOTH talk AND writing (SAME DIRECTION)¹⁸¹</i>	
Egocentric speech	Writer-based writing
Recipient design failure	Narrational gaps and discontinuities
Failure to consider audience	

¹⁸¹ By 'same direction' I mean that elements all have a negative effect or all have a positive effect; the 'opposite direction' meaning that a negative effect in talk is combined with a positive effect on writing or vice versa.

1. Egocentric speech (talk-in-interaction): Egocentric speech is a Piagetian / Vygotskian concept. Piaget describes what he calls the egocentric speech of the child under seven as a 'collective monologue' (Piaget, 1923, p. 41) by which he means that when a child is producing egocentric speech in the company of others he seems to be speaking to them but in fact is carrying on a monologue with others present. It is the involvement of others (even if just by being present) that may give the child's speech the appearance of conversation. His research indicated that almost half the talk of a child aged less than seven or eight consists of egocentric speech (Piaget, 1926). Vygotsky was of the view that egocentric speech is the 'highly important genetic link' (Vygotsky, 1934, p. 25) between the earliest (social) speech used to communicate the child's needs to its carers and inner speech reflecting the gradual transition the young child goes through from thinking aloud to keeping some of their thoughts to themselves. In his view this happens as the capacity to undertake adult thinking develops and speech is only voiced when a person wishes it to be voiced (Vygotsky, 1934). Piaget also saw egocentric speech as an intermediate stage in the child's development of adult speech but from what he called (after Bleuler) autistic speech to social speech. In other words, both theorists regarded the language development process as involving three stages with egocentric stage as the transitional stage but for Piaget the process was from speech for oneself to social speech whereas for Vygotsky the process was reversed. Crucially, both considered that egocentric speech is an aspect of the development of adult speech in the *typically developing child*. It is possible to interpret the non-communicative speech of an autistic child (and Kanner quotes various examples of speech that appears not to be addressed to anyone but the child itself) as egocentric speech. The fact that Piaget had described the earliest form of speech as autistic speech – even though using the term 'autistic' as Bleuler used it, not as Asperger and Kanner used it – might suggest that the speech of the autistic child is delayed in comparison to that of the typically developing child.

I mention the concept of egocentric speech as it appears, to some extent, to mirror both ‘failure to consider audience’ and ‘recipient design failure’ as should become clearer when I have reviewed them. However, in the meantime, the difference between ‘failure to consider audience’ and ‘recipient design failure’ on the one hand and egocentric speech on the other is that the former describes something that adversely affects a listener’s ability to understand what is, essentially, social communication whereas the latter involves no communicational intent whatsoever. So, whether or not one agrees with Piaget and Vygotsky regarding the status of egocentric speech in language development, it appears that egocentric speech is not relevant to consideration of *talk-in-interaction* in autism. I shall say no more about it.

2. Recipient design failure (talk-in-interaction): The first reference to recipient design in Hutchby and Wooffitt’s *Conversation Analysis* (which is the book I usually turn to first on CA matters) is on page 127 where he recounts a point made by Sacks in relation to the issue of showing that one of two participants in talk-in-interaction is taking account of the other’s situation in producing a turn at talk, describing it as ‘a common feature of recipient design in conversational storytelling’ (Hutchby and Wooffitt, 2008, p. 127). Later on they point out that questionnaires are audience designed rather than recipient designed (*ibid.*). The concept of recipient design is not defined by Hutchby and Wooffitt. In her article on the poetics of ordinary talk one of the originators of CA analysis – Gail Jefferson – compares recipient design with another author’s comments ‘on the needs of the listener’ (Jefferson, 1996, p. 4) but clearly assumes that her readers will know what she is talking about. (She also refers in endnotes to discussion of recipient design in some of Harvey Sacks’ lectures.) However, the third pioneer of CA – Emmanuel Schegloff – has briefly defined the fundamental aspects of the organisation of conversation in his paper (with colleagues) on touching points between CA and applied linguistics. Alongside reference to the likes of turn-taking, turn organisation,

and repair he states that speakers ‘Will do all of this [turn-taking, turn organisation, repair etc., NC] *with an eye to their co-participants (recipient design)* and to the occasion and context, its normative parameters and boundaries of duration, appropriate activities and their order, etc., (overall structural organization of the occasion of interaction’ (Schegloff et al., 2002, p. 5). So it can be appreciated that recipient design is the taking account by a speaker of the needs of their speaking partner(s), with the taking account of ‘context’ treated separately.¹⁸² The following transcription reflects recipient design in action:

(4) [Trio:2:1:1]

(A calls B, who is an employee at ‘Bullocks’ Department Store)

- 1→ A: Well I thought I’d jus’ re- better report
 2 to you what’s happened at Bullocks today
 3→ B: What in the world’s happened?
 4 A: Did you have the day off?
 5 (.)
 6 B: Yah?
 7 A: Well I:- (.) got outta my car at fi:ve thirty ... ((Story continues))
 (Hutchby and Wooffitt, 2008, p. 126)

[N.B. It should also be noted that A is not an employee of Bullocks, NC]

Line 1 of this short extract from a longer conversation demonstrates that ‘speaker A is designing this telling specifically “for” her recipient’ (ibid., p. 127) and that ‘Given that Bullocks is B’s place of work, but not A’s, then her reporting of something that happened there on what she believes to be B’s day off (note the way she checks this in line 4) is a way of doing the activity of “showing that I had my mind on you”’ (ibid., p. 127).

3. Tendency toward egocentricity (writing): Quayson, writing about what he regards as literary depictions of autism in Beckett’s novel ‘Murphy’, suggests that:

Despite the fact that the term *autism* itself was introduced into studies of psychopathology only in the classic work on autistic children by Leo Kanner

¹⁸² Presumably, the needs of a speaker’s conversational partner(s) would depend on both the individual circumstances of the partner(s) and the wider context and it is therefore necessary to analyse a turn at talk in both respects, separating the influence on the turn of the partner’s circumstances and wider context.

and Hans Asperger, the protagonist of this modernist novel already displays what we might interpret as autistic features. These features include *extreme egocentricity* and isolation, with the attendant fragility of social interactions that they produce.

(Quayson, 2010, p. 840, the first italics are the author's, the second italics are mine)

Can egocentricity, extreme or otherwise, be seen in novel writing by other autistic authors?

Happé and Frith, in reference to Hacking's work on autistic autobiographies, write of a

'proliferation of autobiographies written by people on the autism spectrum' (Happé and Frith, 2009, p. 1346). Might the increasing preponderance of autobiographical writing by autistics

be a reflection of egocentricity? Of course, one does not have to be autistic to be egocentric;

witness Draaisma in his article on autistic stereotypes writing that it was Rain Man's brother

Charlie Babbitt who was egocentric not his autistic brother! And what does it mean to be

egocentric? A dictionary definition is: "having or regarding the self or the individual as the

centre of all things: an egocentric philosophy that ignores social causes, and having little or

no regard for interests, beliefs, or attitudes other than one's own." Intuitively one would

assume that someone who has difficulty putting themselves in the mind of another might be

egocentric by this definition; but an autistic person may also not be as self-aware as a PNT

individual and so it may be inaccurate to describe the person with autism as "regarding

(themselves) as the centre of all things" since that surely requires an ability to see themselves

as central which they may not have. But a more appropriate definition of egocentrism may

be needed. According to Frith and de Vignemont, from a clinical perspective, Piaget saw

egocentrism 'as an inability to decentre and take another person's perspective' (Frith and de

Vignemont, 2005, p. 722). After providing a vignette of a young man with AS who they

describe as blatantly egocentric Frith and de Vignemont seek to make a distinction between

egocentricity and allocentricity, explaining the difference between the two as follows:

When we adopt an egocentric stance we understand the other person relative to ourselves, which allows us to locate him in our social world and to interact with him. For example, Piaget pointed out that young children can easily understand the relationship between themselves and their mother but it is more difficult for them to understand that their mother is also their father's wife. This understanding requires an allocentric stance, which represents the other independently of one's own current relation with her.
(*ibid.*, p. 721)

Frith and de Vignemont point out that Piaget's views on egocentrism are controversial and that Hobson came to the conclusion 'that egocentrism was not a useful concept to explain the social impairment in autism' (*ibid.*, p. 723), arguing that Piaget 'confounded the egocentric (versus allocentric) stance with role-taking' (*ibid.*, p. 723). What exactly do they mean by this? The crux of the argument made by Frith and de Vignemont is that, in their view, researchers of ToM have concentrated on a first-person perspective (1PP) and a third-person perspective (3PP), totally ignoring the second-person perspective (2PP). They consider this omission to be important because a 2PP is required in taking an allocentric perspective. This is a somewhat complex concept to explain (and there is insufficient space with which to do it justice) but the point Frith and de Vignemont wish to get across is that 'It is only by taking an allocentric perspective that one can fully understand social relationships.'¹⁸³ Therefore, purely egocentric mentalizing would lead someone to a defective folk psychology' (*ibid.*, p. 726). Frith and de Vignemont think that AS 'involves a disconnection between egocentrism and allocentrism' (*ibid.*, p. 735) or 'imbalance' (*ibid.*, p. 732) between the two making it difficult for people with AS to switch from one of these perspectives to the other. They present three hypotheses¹⁸⁴ – which they link to existing cognitive theories of autism from the literature – to try and explain why this should be. They conclude their interesting paper with the

¹⁸³ Frith and de Vignemont give the example of a young child unable to grasp the fact that their mother has her own life external to the relationship between them if they are too young to have developed the ability to take an allocentric perspective (Frith and de Vignemont, 2005).

¹⁸⁴ The hypotheses involve (1) a need to process a lot of complex information coupled with WCC, (2) difficulty in switching between egocentric and allocentric perspectives coupled with ED, and (3) a confusion of objective and subjective perspectives coupled with metarepresentational failure (Frith and de Vignemont, 2005).

statement that: ‘It is only when we are able to adopt an allocentric stance that we can truly know what it is to be egocentric, and it is only when we are able to adopt an egocentric stance that we can achieve an allocentric understanding of others’ (ibid., p. 735).¹⁸⁵

Where does all this leave us as regards the matter of a potential tendency for egocentricity in the writing of autistic people? If I have understood Frith and de Vignemont correctly, they consider that naïve egocentrism is a feature of AS that PNT people usually mature out of and, presumably, it is that naïve egocentrism that could be at play in the writing of some autistic people. As for a potential imbalance between egocentrism and allocentrism, might that be one of the factors that hinder the ability of the autistic writer to produce effective characterisation because developing relationships between characters is difficult?

4. Writer-based writing (writing): As referred to previously, Brown considers that ‘While writing a novel or story or poem, the author with autism is less likely to be thinking about the reader’s needs than a neurotypical writer would’ (Brown, 2010, p. 17), explaining that this is due to the ‘way autism affects an individual’s social sense’ (ibid., p. 17). If an author is not considering the needs of their readers as would typically be the case for an author, then, presumably, they are giving more attention to their own needs. This seems to me to be another way of expressing the concept of writer-based prose, also referred to earlier, and introduced by Flower who defined the concept as follows:

a verbal expression written by a writer to himself and for himself. It is the record and the working of his own verbal thought. In its *structure*, Writer-Based prose reflects the associative, narrative path of the writer’s own confrontation with her subject. In its *language*, it reveals her use of privately loaded terms and shifting but unexpressed contexts for her statements. (Flower, 1979, pp. 19/20, author’s italics)

¹⁸⁵ Presumably, Frith and de Vignemont consider that one would need to be able to understand both allocentric and egocentric stances to appreciate either stance as otherwise their quotation involves circular logic.

I suggested that this is writing undertaken primarily *for the benefit of the writer* himself or herself or, in other words, it is writer-based writing rather than reader-based writing. Flower made a connection between writer-based prose and egocentrism, but, in my view, the concept does not *necessitate* egocentricity in a Piagetian / Vygotskyian sense and may simply be, as she points out, a result of a naturally associative writing style (Flower, 1979), a reflection of a deliberate use of the technique to explore the being-in-the-world of the writer or, as Brown suggests, a way of coping with stress (Brown, 2010).

I have hypothesised that writer-based prose may be either a deliberate technique used by authors with poor working memory and/or a natural autistic writing dynamic. If a writer-based dynamic results from autism it seems to me unlikely that the transformation of writer-based prose into prose designed for the needs of readers that Flower refers to as a 'multistage process' (Flower, 1979, p. 37) of writing would occur or, at least, that an autistic author's transformation would not be as extensive as that of a PNT author. Flower describes poor writing as an 'undertransformed mode of verbal expression' (ibid., p. 19); it is possible that the writing of autistic authors is also undertransformed in this sense (if transformed at all).

5. Narrational gaps and discontinuities (writing): Sacks writes as follows of the 'peculiar narrational gaps and discontinuities' (Sacks, 1995, p. 247) in Temple Grandin's writing:

sudden, perplexing changes of topic, brought about (so Francesca Happé suggests in a recent essay on the subject) by Temple's failure "to appreciate that her reader does not share the important background information that she possesses." In more general terms, autistic writers seem to get "out of tune" with their readers, fail to realize their own or their readers' states of mind. (ibid., p. 247)

Intuitively, as an autistic person may have difficulty in taking their reader's perspective, producing what Flower has called writer-based prose (Flower, 1979), one would expect that they will not always notice when they have failed to include details of associations that they are aware of but their reader is not, leading to gaps and discontinuities in their texts. But there are many examples of apparently autistic writing that do not feature discontinuities and gaps. Whilst Sacks rightly refers to such features in the writing of Grandin, I do not believe one can say the same thing about Gunilla Gerland's writing for instance. To my mind, Gerland's writing is superbly fluent and coherent in a way that Grandin's is not (unless she has the assistance of a co-writer). Clearly, narrational incoherence is not a feature of the writing of *all* autistic people. Perhaps there is a link between coherence and ToM, possibly due to a difficulty in taking both egocentric and allocentric perspectives?

As pointed out at the beginning of this section of the chapter, the matters under consideration are complex; too complex for me to do justice to them in the space and time available. However, I agree with Frith and de Vignemont that the naïve egocentrism of the child can often still be observed in the autistic adult and that this may affect their ability to take perspectives in both talk-in-interaction and writing. This suggests to me that there is likely to be a tendency to adopt a self-centred stance which would lead to a failure to reflect the needs of conversational partners in talk-in-interaction (which might be described as failure to design for the recipient or failure to consider the audience; they are one and the same) and a similar failure to reflect the needs of readers (the result of which might be described as writer-based writing together, perhaps, with narrational gaps and discontinuities). I conclude that there is a strong likelihood that recipient design failure (failure to consider audience) and writer-based writing are specific features of autistics' talk-in-interaction and writing respectively that may reflect their autism. The presence or otherwise of narrational gaps and

discontinuities is observed in some examples of autistic writing but not in others. It is possible that particularly expert autistic writers may be more prone to write for themselves than for an audience whilst able to avoid the incoherence and narrational gaps and discontinuities that appear in the writing of less expert autistic writers.

Specific themes of alienation and the self

I have already mentioned some of the many examples of themes of alienation – in the sense of seeing oneself as being different from the rest of the world – in the autobiographical and novel writing of autistic authors (of course, in the case of the autobiographies it is that very alienation that may have prompted the writing in the first place). A theme of alienation does indeed seem to permeate the writing of autistic authors in that there are few, if any, examples of autistic writing in which alienation is not a feature. Brown considers that this theme ‘is strongest among the authors who were never diagnosed with ASD’ (Brown, 2010, p. 31) since ‘Diagnosis leads to self-understanding which can eventually lead to acceptance [I think she refers to self-acceptance, NC]’ (ibid., p. 32) and a change of theme from alienation to ‘triumph over adversity’ (ibid., p. 32). So Brown’s contention is that prior to diagnosis a theme of alienation is generally seen in autistic writing and that this is often transformed into a theme of triumph over adversity as that alienation is understood, if not defeated, because, at last, the writer has a place in the world (although it is not the same place as that occupied by a PNT author it is a place of their own nonetheless). There are, of course, many other reasons for feeling a sense of alienation (e.g., living in a foreign country) and of triumph over adversity (e.g., overcoming physical illness) so these themes clearly cannot be unique to autism. Whilst difficulties with writing for an audience and with characterisation (when, in other respects, an author is a highly creative writer) may imply autism *because these features of writing may be linked to specific diagnostic features of autism*, the appearance of either of

the two themes referred to by Brown may only be a pointer to the possibility that the writer may be autistic rather than a strong indication that the writer is actually autistic. Nevertheless, if themes of alienation and triumph over adversity are generally seen in autistic writing, in my view, they could still be regarded as specific features of that writing and hence, I agree with Brown that a theme of alienation is a specific feature of much writing by *undiagnosed* autistics that reflects their autism and that a theme of triumph over adversity is a specific feature of much writing by *diagnosed* autistics that reflects their autism.

In her review of poetry by both autistic and PNT authors, Ilona Roth draws attention to the fact that many more autistic poets than non-autistic poets write about themselves (and the literary category of autistic autobiography has already been mentioned), pointing out that:

The most strikingly distinctive feature of the autistic poets' work was their pronounced focus on the self. Their themes mostly concerned the self or relationships between the self and others, whereas the non-autistic poets also wrote frequently about philosophical, political or fantastical topics, as well as favoring poems about nature, places or events. The autistic poets also mostly wrote in their own voice or perspective (sic), whereas the non-autistic poets also used other voices, took the perspective of others, or talked about others from a neutral stance.

(Roth, in Osteen, 2008, p. 155)

Roth suggests that this tendency of autistic authors to write about themselves is somewhat paradoxical given that persons with autism are generally thought to lack the levels of self-awareness associated with their PNT peers but adds that just because an author writes about herself does not necessarily imply that she understands herself well; indeed, it may be that autistic authors write about themselves in an attempt to better understand themselves i.e., in an attempt to make up for a lack of typically developing levels of self-awareness. Hermelin, cited in Roth, has proposed that 'autistic artists may create works more as a means of self-expression than as a form of communication' (Hermelin, 2001; Roth in Osteen, 2008, p. 157)

which Roth describes as soliloquy. I would add that, although Emily Dickinson, perhaps the most famous autistic poet of them all, did not write about herself so much as about death (which, incidentally, chimes with Roth's (2008) comment about the heightened tendency of autistic people to try and produce some order out of the chaos of life through narrative) and solitude it can be argued that both her main themes were inextricably linked to her own situation. Be that as it may, when the tendency of autistic poets to write about themselves is considered alongside the autistic autobiography phenomenon, in my view the self looms sufficiently large in autistic writing for a case to be made that the *extent* of the focus on the self is often a specific feature of autistic writing reflecting the writer's autism (although, of course, PNT authors may also be self-preoccupied).

Julie Brown's other proposed features of autistic narrative writing

1. Genre-bending: I concluded the earlier section on Brown's 'breaking the rules' (genre-bending) autistic writing category that it is very clear that autistic writers are eminently capable of breaking the literary rules and that many have done so; indeed, that in some way each one of the autistic authors reviewed has produced original and unconventional work. In addition to the development by Sherwood Anderson of a new genre, I could also have referred to what Brown describes as '(Emily) Dickinson's battle with conventional poetic form' (Brown, 2010, p. 101) which led her to write in a style more suited to modern times than her own time (1830-1886). But is genre-bending a specific feature of autistic writing that may reflect the writer's autism? Reference has already been made to the fact that Asperger remarked that autistic children have an especially creative attitude to language (particularly those who are high-functioning). He also thought that these children would always develop their own approach to thinking and learning; he clearly felt (as I do too) that high-functioning persons with autism are autodidactic and that this almost inevitably leads to

an idiosyncratic development of thought and learning. One can imagine that the result of this would tend to be something out of the ordinary and, if coupled with an ability to write, could lead to some especially creative work. Brown cites Fitzgerald's belief that 'this creative stubbornness carries on into adulthood, and that this enhances innovation' (Brown, 2010, p. 21). My hypothesis is, therefore, that autistic writing will be idiosyncratic and that, coupled with a talent for writing, this may lead to a tendency to 'break the rules'; in other words, I think that it is the *idiosyncratic nature* of the writing of autistics that may be a specific feature of much autistic writing reflecting their autism and that a combination of that idiosyncratic approach and writing talent may lead to unique and special writing.

2. Absence of sustained narrative: In relation to the proposed absence of sustained narrative coupled with quality of randomness Brown proposes as a further feature of autistic writing, she refers to a struggle with plot, a struggle to sustain narrative at novel length, the gaps and discontinuities that reflect an 'over-reaching' of themselves when they do attempt to sustain plot and narrative, and a quality of randomness that is linked to a difficulty in sustaining narrative. Brown's overview of this aspect of autistic writing is that autistic authors generally either write in a medium that does not require sustaining novel length narrative or, if they do attempt this, tend to produce prose that reflects an inability to sustain narrative. It would appear that a difficulty in sustaining narrative beyond short story length may be a specific feature of much autistic writing that reflect the writer's autism and that the difficulty in sustaining narrative may affect the fluency of narrative written beyond short story length.

3. Absence of fully-drawn characters: Brown also proposes that the social withdrawal and inability to relate to other people seen in autism leads to a lack of fully-drawn characters in autistic writing, suggesting that autistic writers get around a difficulty with characterisation

by either avoiding the need for characters, avoiding the need to give any depth to their characters, or creating characters in their own image. It does appear that a specific feature of much autistic narrative writing that reflects their autism is that, where characterisation is attempted by a writer, the characters are generally lacking in depth and superficial.

4. Multitudes of detail: Brown provides many examples (to which I have added) of autistic writers providing huge amounts of what PNT authors would, I think, generally regard as extraneous detail. It is, perhaps, more than likely that an author with autism will be writing on a subject that is an autistic *special interest* which may explain the apparent lack of control over the amount of detail provided for their readers often observed; indeed, if an autistic writer is writing more for themselves (writer-based writing) than for their readers it would seem intuitively right that they may write for as long as they want to on a subject without giving much, if any, thought to the way in which the extent of the detail provided is likely to be received by readers. In this sense, an apparent 'lack of control' (by which I mean a lack of appreciation that readers may be put off by detail that they do not regard as necessary in context) could give rise to the 'multitudes of detail' (Brown, 2010, p. 26) often provided by autistic authors. An apparent lack of control might also lead to a tendency for authors with autism to have difficulty in getting the balance right between providing too much detail (or too little detail) in talk-in-interaction. It would seem, therefore, that a 'lack of control' over the amount of detail provided may be a specific feature of much autistic writing that reflects the autism of the writer and often gives rise to multitudes of arguably unnecessary detail.

5. Rich use of language (including rich symbolism): Brown concludes that 'Communicating ideas and feelings through rich symbolism is a special gift for writers with Asperger's syndrome' (Brown, 2010, p. 30). She suggests that 'indirect presentation of the self is easier

to manage than blatantly revealing oneself through direct language' (ibid., p. 30) although the increasing number of autistic autobiographies, containing extensive personal detail that PNT authors might be loathe to provide, may suggest otherwise. Perhaps it is the uniqueness of their being-in-the-world that gives rise to a tendency to break the rules (see the genre-bending section) leading to the use of idiosyncratic language that appears to be a rich use of language in comparison to a more 'traditional' PNT writing style. But are there not examples of rich use of language by apparently PNT authors? And also examples of highly idiosyncratic language use by apparently PNT authors? Of course there are plenty of examples of both. Although there are many instances of rich use of language by autistic writers, including rich use of the symbolism that some, erroneously in my view, consider beyond the ability of those with autism, I can see no justification for regarding rich use of language as specific to autistic writing and would rather argue that it is specific to much of the best writing by both autistic *and* PNT authors. If the aim is to understand the specific nature of autistic writing it would seem perverse to include something that is just as much a feature of the writing of non-autistic people. Would such a feature tell us anything about autistic writing other than that in some particular respect it does not differ from PNT writing; in which case, in what sense would this aspect of the writing be autistic as opposed to a feature of writing generally?

Interest in systems

Quayson suggests that an interest in systems can be observed in the writing of Beckett's 'Murphy' which he regards as being due to their autism (Beckett *and* Murphy!). I wrote in a previous chapter that, "In my view there are sufficient examples of systemising at play in the work of *male* authors who were probably on the autism spectrum to reliably conclude that the focus on systems noted by Baron-Cohen as an aspect of autism ... does impact on the writing style of some autistic authors; the difficulty in identifying systems in the writing of female

authors on the spectrum may, of course, be that I have not looked hard enough but could also be explained by Baron-Cohen's theory." On further reflection, I see elements of systemising at play in the writing of Opal Whiteley¹⁸⁶ with her development of her own 'language' incorporating many French words and which Brown regards as resembling French in its syntax (Brown, 2010). Nevertheless, in view of the amount of apparent systemising in the writing of male autistics I conclude that an interest in systems is a specific feature of the writing of many *male* autistic writers that reflects their autism.

This now concludes my attempt to identify and compare the proposed features of autistic talk-in-interaction and narrative writing. I shall move on to consider the various theories put forward as an explanation of autism, commencing with the three most prominent theories followed by a number of less well known theories, and then develop a synthesis of some of these lesser known theories that appear to me to have much to add to an understanding of autism from a linguistic perspective, a perspective that Kanner (and others) regarded as an important investigative aspect of autism, and that I consider, following a detailed literature review, to have been the subject of a degree of neglect; a somewhat surprising fact bearing in mind that autism involves difficulties with social learning that are inextricably tied up with the learning by the young child of their first language during their formative years.

¹⁸⁶ One might also regard Temple Grandin's interest in cattle machinery as an example of systemising.

CHAPTER VIII

REVIEWING THE PROMINENT THEORIES OF AUTISM

In this chapter I shall describe in some detail the main theories of autism, by which I mean the prominent theories covered in all textbooks on autism and mentioned in most of the many books providing advice and guidance on aspects of autism. There are other theories of autism that are less well-known, some 'sadly neglected', to quote Hobson in relation to one such theory (Hobson, 1993, p. 76) and then, and perhaps most important of all, there are Wittgenstein's ideas on the understanding of mind which, although not written with autism in mind, have much to contribute in my opinion but have 'largely been absent from theoretical discussions of children's thinking about the mind' (Montgomery, 1997, p. 295). But for the time being I want to describe the main theories; with a particular emphasis on the so-called 'theory of mind' (ToM) for the reason that Wittgenstein's criteriological view of the understanding of mind, dealt with later, can be considered as a version of ToM.

Theory of mind

The so-called ToM theory of autism is one of the three 'big ideas' in autism theory (the other two theories being executive (dys)functioning (EF) and weak central coherence (WCC)). ToM is a reference to an individual's ability to attribute mental states to themselves and to others (Frith and Happé, 1999). The descriptor ToM is a little misleading as this theory does not actually suggest that individual human beings develop their *own* hypotheses; rather it is a way of describing the need for individuals to develop an understanding that objects and other

persons have separate existence, that other persons have their own mental state that differs from theirs, and to be able to 'put on the shoes' of another person mentally. This latter function is often referred to as 'mind-reading' (Baron-Cohen, 1995) although this also is a misnomer since ToM involves the use of sensory stimuli to guess the mental state of others. When a child is born it has no understanding that the world exists independently of itself. The child cannot form mental representations of persons or objects. At this earliest stage of its life an object exists for the child only while it is in sight and ceases to exist when out of sight. As the child grows its developing ToM enables it to form mental representations of other objects and persons and, later still, it learns that other persons have a thinking existence of their own (Frith and Happé, 1999). The ability of typically developing children to evaluate the thoughts, emotions, intentions and beliefs of others grows over time.

A supposedly key aspect of the process of understanding other minds is the knowledge that a person has their own beliefs and that a belief may be true or false. It has been held that the ability to understand false beliefs is core to ToM in that the formation of a false belief requires a child to understand that a person's belief is formed about a representation of something rather than of its actual condition (in the case of true beliefs the other person's representation accords with the actual state so there is no need for a representation of it) (Frith and Happé, 1999). When Baron-Cohen et al. found that 80% of the children with autism in their initial study failed a first-order false belief task they concluded that autism involves a *deficit* in ToM skills (even though the other 20% succeeded in the task) (Baron-Cohen, Leslie, and Frith, 1985). Much subsequent research (such as Russell et al., 1999; Luckett et al., 2002; Colle et al., 2007a) has been undertaken to prove that ToM abilities lie at the heart of autism by evaluating the capability of children with autism and AS to pass false belief tests in comparison to control groups of typically developing children and those with

learning difficulties. Verte et al. reviewed the research in this area and, as with much research in the field of autism, the findings conflicted and no clear conclusion could be drawn (Verte et al., 2006). Happé (1994) drew attention to the 20% of autistic individuals who passed the original false belief tests, pointing out that this indicated that a ToM deficit could not be universal in autism¹⁸⁷. There are, of course, various reasons why this might be the case. Rajendran and Mitchell mention three: individuals with autism tackle the test in a different way to their PNT peers; the extreme opposite view that if any autistic person passes a false belief test the ToM hypothesis has been disproved; and a middle ground position that ToM explains some aspects of autism and not others (Rajendran and Mitchell, 2007). Other possible reasons include the view that false belief tests are not a true measure of ToM abilities and should be abandoned (Bloom and German, 2000), that the trajectory towards fully-fledged ToM may be a lot slower than expected (Carpendale and Chandler, 1996) (and perhaps even slower for a child with autism who does not have the typically developing child's propensity to socialise), or that young children are unable to restrain a tendency to act impulsively (and thus, for example, point to where the object referred to above actually is *even though knowing this is not the answer to the question posed by the researcher*).

In view of the challenges to his theory posed by those researchers who drew attention to the fact that some children passed false belief tests, Baron-Cohen reconsidered his position, describing the situation as a *delay* in developing ToM skills rather than a deficit (Rajendran and Mitchell, 2007). Although this modification to the ToM theory was again challenged – leading various researchers to conclude that autism did not involve universal ToM deficits –

¹⁸⁷ Boucher has highlighted recently various difficulties with the ToM explanation of autism in addition to the fact that some children with autism pass some false belief tests. She lists the finding that inability to pass false belief tests is not specific to autism (some children with Down Syndrome having failed these tests); Hobson's view that the ToM explanation ignores difficulties with emotion-processing; and that, as typically developing children fail false belief tests before age four, the social and communicative difficulties autistic children have *prior to that age* cannot be explained by a failure to pass false belief tests at or after age four (Boucher, 2012).

the suggestion of a delay in the development of ToM skills was supported by a Happé study showing ‘a strong association between verbal mental age and false belief task performance in children with autism’ (ibid., p. 227). This led to the introduction of a range of more advanced tests of ToM skills – including the ‘Reading the Mind in the Eyes Task (Eyes Task)’¹⁸⁸ (Baron-Cohen et al., 1997) – since the then existing tests were insufficiently sensitive to identify ToM deficits in higher-functioning children who would be expected to ‘perform at ceiling’ (ibid., p. 227). (I shall discuss the Eyes Test shortly in connection with Wittgenstein’s thoughts on theory of mind.) The expression ‘mindblindness’ was then introduced but there are problems here with Rajendran and Mitchell writing as follows:

Advanced tests of theory of mind seem not to be based around the principle that it is vital to test a person’s understanding of the causal relation between informational access and the consequent state of belief. Researchers have arguably been able to free themselves from the requirement for this causal relation in theory of mind tasks by changing the name to mindblindness. *Consequently autism is understood as a condition of mindblindness, rather than a deficit in theory of mind.*
(ibid., p. 229, my italics)

Of necessity, this has been a very brief summary of the developments in theory of mind research; it was not my intention to give a detailed account, simply to provide sufficient information as background to the comments on autism theory in Chapters IX and X. It will in due course become apparent that, whilst believing in the concept of mindblindness, I do not accept what has almost become the ‘traditional’ ToM account of autism. In holding this view I am in the company of Boucher who, in her recent review of ToM alongside psychological explanations of the socio-emotional-communicative difficulties in autism, writes that “impaired ToM [defined as the high-level mindreading abilities developed by typically

¹⁸⁸ The ‘Reading the Mind in the Eyes Test’ and the associated ‘Reading the Mind in the Voice’ test are both *multiple choice* tests. I think this is significant as it gives the person being tested an opportunity of ‘hacking out’ (Frith, Happé and Siddons, 1994) a response by process of elimination. This is what I did when taking the Eyes Test; I think I would have identified far fewer expressions correctly if not given any ‘prompts’!

developing children from about the age of four, NC] cannot logically be a major cause, let alone *the* major cause, of the socio-emotional impairments pathognomic in ASD” (Boucher, 2012, p. 230, author’s italics); although she does regard ToM as a contributory factor.¹⁸⁹

Extreme male brain theory (empathising and systemising)

There is a long history of researchers looking for cognitive differences between the sexes. This area of research has generally focused on certain cognitive capacities, such as verbal, spatial and mathematical reasoning where it is often asserted that there are differences between men and women. For instance, when viewed in terms of broad averages, women are often considered to be better than men verbally, and men score more than women in studies of spatial and mathematical reasoning. This research into sex differences in cognition has encompassed studies in the ability of men and women to empathise, with the findings being that women are better at men at this task. The realisation that persons with autism not only have difficulty in empathising but may also exhibit various skills that can be summed up as an ability to systemise¹⁹⁰ has clearly caused some researchers in the field of autism to wonder if there is any connection between autism and a person’s sex. A further theory attempting to explain the causation of autism is known as the ‘extreme male brain theory’ as it is based on the assumption that autism is one end of a continuum of cognitive functioning associated with gender due to research findings that suggest that women are better at empathising than men and men are better at systemising than women. With this theory – which developed out of ToM – it is considered that the brain of a person with autism is an example of an ‘extreme male brain’ (EMB) in that the male capacities are at their greatest and the female capacities at their weakest (which intuitively appears to make sense given that those with autism often

¹⁸⁹ I would add that, in my view, it is just as likely that social interactional issues give rise to ToM difficulties as vice versa given that correlation does not indicate causal direction.

¹⁹⁰ Systemising skills mentioned by Lawson, Baron-Cohen, and Wheelwright in their 2004 paper include mathematical reasoning, mental rotation, mechanical reasoning, and spatial visualisation.

have a particular ability at understanding systems but difficulty in reading minds and hence with empathising with another person's situation). The empathising-systemising model of neurological functioning has two 'psychological dimensions' (Lawson et al., 2004, p. 302) corresponding with folk-psychology and folk-physics, and where empathising and systemising are described as follows:

Empathising is defined as the drive to identify emotions and thoughts in others and to respond to these appropriately. It is not simply about inferring what someone else is thinking or feeling, though this is an important part of empathising. Rather, it includes an appropriate spontaneous emotional reaction. Empathising provides a way of making sense of other's behaviour and a natural way of responding to others. Systemising is defined as the drive to analyse and build systems, with the aim of understanding and predicting non-agentive events. Systems can be technical (e.g., the workings of a machine), natural (e.g., the process of coastal erosion), abstract (e.g., mathematics), motoric (e.g., a guitar playing technique), taxonomic (e.g., a criteria for ordering compact discs) or social (e.g., a taxation system). (Lawson, Baron-Cohen, and Wheelwright, 2004, p. 302)

Lawson, Baron-Cohen, and Wheelwright hypothesise that the cognitive styles associated with empathising and systemising are as set out in Table 9 below.

Table 9 - Possible Cognitive Styles in the Empathising / Systemising Model

Cognitive style	Description
Balanced	Aptitude in empathising and systemising is at a similar level
Empathising bias	Empathising skills are greater than systemising skills by a small but significant amount
Systemising bias	Systemising skills are greater than empathising skills by a small but significant amount
Extreme empathising bias	Empathising skills are much greater than systemising skills
Extreme systemising bias	Systemising skills are much greater than empathising skills

From Lawson, Baron-Cohen and Wheelwright, 2004

Lawson, Baron-Cohen, and Wheelwright originally appeared unsure as to whether or not there is any correlation between empathising and systemising or, alternatively, if the two dimensions are entirely independent of each other. However, the model described in their paper ‘assumes that empathising and systemising are normally distributed across the population and independent of each other’ (ibid., p. 304) although they qualify this with a statement to the effect that these assumptions may have to be changed to reflect new data. These theorists contend that empathising and systemising are traits that are found to a greater or lesser degree in all human beings with some persons, as is the case with all normally distributed traits, being good at one trait and poor at the other trait. Since a key aspect of autism is a lack of empathy, and it has been found that persons with AS often have greater than average systemising skills, and there appears to be a substantial bias towards maleness in autism¹⁹¹, Lawson, Baron-Cohen, and Wheelwright hypothesise that autism is the cognitive style associated with a brain at the extreme male end of the normal distribution, hence the EMB theory of autism (ibid.).

For these authors, neither the EF nor the WCC models of autism (both covered below) can ‘account for the specific pattern of results’ (ibid., p. 307) they found in their experiments into empathising and systemising. This finding led them to conclude that the EMB theory is the best explanation of autism currently available to us.

Executive (dys)functioning

A further approach to explain autism is known as executive (dys)functioning (EF). Executive functioning involves ‘several abilities for preparing and engaging in complex organised

¹⁹¹ Lawson, Baron-Cohen, and Wheelwright focus on AS in their 2004 paper, referring to a 10:1 ratio of males to females in AS. The ratio of males to females in autism is said to be 4:1 (e.g., Bryson et al., 1988; Gillberg et al., 1991; Gillberg and Coleman, 1992). These are generally accepted figures. I believe that current diagnostic criteria are male-centric but this is not the place to critique current understandings of gender and autism.

behaviour' (Macintosh and Dissanayake, 2004, p. 426). The main components of executive functioning have yet to be definitively established but are considered to encompass formation of abstract concepts, planning, focusing and sustaining attention, shifting focus, and working memory (Macintosh and Dissanayake, 2004; Attwood, 2007). Studies (such as Liss et al., 2001; Fisher and Happé, 2005; Verte et al., 2006) have demonstrated that many persons on the autism spectrum have EF problems but that, although it is pervasive, it is not universal in autism, also that some EF processes are less likely to be affected in autism than others (e.g. difficulty with planning is more common in autism than inability to inhibit impulsive behaviour). Ozonoff and Jensen found impairment in 39 of 40 persons with autism in at least one EF test (Ozonoff and Jensen, 1999). A review of the EF literature by Liss et al. stated that the most robust finding was that persons with autism tend to make perseverative errors and have difficulty changing cognitive set on challenging tasks (Liss et al., 2001). I believe it is arguable that EF difficulties are seen as much in the PNT as in the autistic neurotype.

Weak central coherence theory

Although not mentioned in the Verte et al. study, another key theory of causation in autism is the weak central coherence theory. This theory attempts to explain why persons with autism exhibit particular strengths as well as weaknesses. Weak central coherence (WCC) has been described as being 'remarkably good at attending to detail but (having) a weakness in perceiving and understanding the overall picture, or gist' (Attwood, 2007, p. 241). Central coherence theory states that persons with autism will tend to have WCC, tending to focus on detail rather than the 'big picture'. In accordance with this theory it should be possible to see strengths in the manipulation of detail in addition to difficulties in forming a holistic picture from the detail. This profile of strengths and weaknesses is now described by Francesca Happé and Uta Frith (Happé and Frith, 2006) as a *preference* for local processing rather than

the weakness they originally regarded it as. They now regard WCC in autism (with the concomitant strengths) as a difference in information processing style, rather than an impairment, and argue that there is a continuum of central coherence along which all people vary, with persons with autism lying at the weak end (Happé and Frith, 2006).¹⁹² In their study of central coherence in typically developing school children, Pellicano, Maybery and Durkin did not find proof of the continuum hypothesis and conclude that their findings do not support central coherence theory ‘at least with respect to its capacity to explain information processing in children *without* autism’ (Pellicano, Maybery and Durkin, 2005, p. 544, my italics). But they add that findings from studies using accepted central coherence tasks support the possible application of central coherence theory to persons with autism (ibid.). A recent study by Kaland, Mortensen and Smith did not lend support to the central coherence hypothesis (Kaland, Mortensen and Smith, 2007). It would seem that the jury is still out as regards the efficacy of central coherence theory in autism.

Quite recently, Happé and Frith have undertaken a literature review of central coherence research (Happé and Frith, 2006). It appeared to them that the general consensus of the research is that central coherence is unlikely to be a primary cause of deficits seen in autism. Happé and Frith write that ‘the original suggestion of a core deficit in central processing, manifest in failure to extract global form and meaning, has changed from a primary problem to a more secondary outcome (and) given way to the suggestion of a processing bias and cognitive style’ (Happé and Frith, 2006, p. 6). These authors no longer consider that weak central coherence causes or explains the social deficits in autism but simply that it ‘may be one aspect of cognition’¹⁹³ in autism (Happé and Frith, 2006, p. 6).

¹⁹² The idea that there is a central coherence continuum straddling both autistics *and* the PNT makes no sense if one accepts that autism involves a distinct cognitive difference.

¹⁹³ Another aspect of cognition in autism may be Prizant’s *gestalt mode* of cognitive processing which proposes that autism involves the learning of language in chunks (as against an *analytic mode* of processing where

After reviewing the main theories of autism I shall now consider some less well-known theorising as I think that various relatively neglected theories have much to offer in developing an understanding of autism and will assist me in forming a view as to which theory (or theories) best explains the nature of autistic talk-in-interaction and writing.

language is built up piecemeal from smaller elements). It might appear that a gestalt (holistic) mode of cognitive processing is diametrically opposed to the WCC hypothesis with its suggestion of a cognitive preference for processing detail. However, Noens and van Berckelaer-Onnes believe the two hypotheses to be consistent, writing that 'At first sight, piecemeal processing (conform the central coherence account) (sic) and gestalt processing may appear contradictory. However, they are closely intertwined, since adequate sense-making is a prerequisite for meaningful analysis and segmentation. If one is unable to extract meaning by interrelating the relevant pieces of information and linking them to previous experiences (as predicted by the central coherence account), the only option is to memorize complete chunks and reproduce them identically' (Noens and van Berckelaer-Onnes, 2005, p. 12-13).

CHAPTER IX

REVISITING SOME LESSER KNOWN THEORIES OF AUTISM

As with so many arguments within the autism research community, (his) error lay in setting his own and other theories against each other *instead of seeking synthesis*.

(Belmonte, in (Ed.) Osteen, 2008, p. 171, my italics)

The aspects of things that are most important for us are hidden because of their simplicity and familiarity.

(Wittgenstein, 1958, p. 50)

Research question 5) is “Which theory (or theories) of autism best explains the features of autistic talk-in-interaction and autistic narrative writing that are agreed upon or contested in the field or can be discovered?” The first step towards an attempted response to this question was to identify and review the current theories of autism. Having discussed the ToM, ED, EMB, and WCC theories, I shall now review the following less well-known theories before attempting a synthesis of autism theory as an explanation of autistic language methods¹⁹⁴:

1. Interactional experience theory¹⁹⁵;
2. Narrative Practice Hypothesis;
3. Sensorially disturbed interaction hypothesis;
4. Time-parsing deficit hypothesis;
5. Enactive mind hypothesis;
6. Enhanced perceptual functioning in autism;
7. Single Attention and Associated Cognition in Autism;
8. Attention, monotropism and the diagnostic criteria for autism.

¹⁹⁴ It is not my intention to try and explain all the various aspects of autism; attempting this in relation to autistic language methods is difficult enough!

¹⁹⁵ This is my name for Wootton’s version of interaction theory. The name is sourced from Wootton’s own writings; he refers to ‘the lack of ... *interactional experience* (underpinning) the much diminished skills [in understanding others, NCJ] of the autistic child’ (Wootton, 1997, p. 92, my italics).

How is it that people can gain *direct* access to another mind? In making the claim that direct access is not just possible but is the primary means by which individuals understand what another person is thinking, Gallagher relies on the developmental psychological concepts of ‘primary intersubjectivity’ and ‘secondary intersubjectivity’. In what he calls ‘a quick summary of the hard-won evidence provided by developmental psychology’ (Gallagher, 2008, p. 166) Gallagher writes of primary intersubjectivity that ‘By the end of the first year of life, infants are capable of a non-mentalistic, *perceptually-based* embodied understanding of the intentions and dispositions of other persons’ (ibid., p. 166, my italics) and that ‘secondary intersubjectivity builds on these primary perceptual and interactive capabilities ... when infants start to recognize *context* as significant’ (ibid., p. 166, my italics). He goes on to state that many theorists regard ‘the capabilities of primary and secondary intersubjectivity to be *precursors* to full-blown ToM’ (ibid., p. 166, author’s italics) in the sense that fully-fledged ToM either builds on or replaces primary and secondary intersubjectivity. However, in his opinion ‘adult phenomenology attests to the continued role of primary and secondary intersubjectivity in our everyday understanding of and interaction with others’ (ibid., p.166), quoting Scheler (1954) and Wittgenstein (1967; 1980) in his defence and writing that ‘Psychologists provide important empirical evidence that our everyday adult interaction is primarily *perceptual* and *contextual*’ (ibid., p. 167, my italics). In other words, he considers that direct access to other minds is achieved by means of perception of facial expressions and body language in the light of the context in which the person does the perceiving.

Interactional experience theory

But there is another very interesting angle on interaction theory (although the author has not to my knowledge referred to his thoughts on the subject as a version of interaction theory); in

connection with his ethnomethodological viewpoint that sequential structuring of talk-in-interaction lies at the heart of a child's (and, of course, an adult's) ability to gain an understanding of other people, Wootton writes that 'what is called for is not so much the capacity to make inferences about what is in the minds of other people as a capacity to recall other people's publicly stated preferences, with the possibility of enquiring as to the nature of these preferences if such information is not available' (Wootton, 2002, p. 91).

In 'Interaction and the Development of Mind' Wootton recounts his analysis of 1,020 minutes of video recorded interactions involving his typically developing daughter, Amy, himself, and his wife for a period of one year commencing when Amy was 2 years 1 month old (transcribed using SSJ CA). He intends to demonstrate that:

(rather than) two minds thinking in like manner. What the child acquires ... is a capacity to identify, and give special regard to, stances which have been taken by her interactional partner. It is in taking such stances into account that the child is taking a major step towards recognizing the existence of a realm of social activity which is, in some sense, independent of herself (ibid., pp. 25/6)

Through an in-depth analysis of Amy's requesting¹⁹⁶ behavior between two and three years of age Wootton demonstrates that from about the age of two children can act on the basis of understandings gained through talk-in-interaction with their carers. In some cases it is an understanding gained from earlier in the conversation in which they are currently engaged

¹⁹⁶ Wootton regards the ability of a young child to make requests of other people as of 'central significance' to the development of the child's interactional ability. He stresses that at the age of 2 years 6 months about 30% of a child's utterances consist of attempts to achieve control over someone else's behaviour (Wootton, 1997). A search of the literature shows that only about 20 items have been published specifically on the subject of requests in *autism* (out of the thousands of papers on aspects of autism published annually this is a miniscule figure). Of these 20 articles, about 60% relate to training/teaching methods (e.g. discrete trial instruction and demand training for teaching children with autism to make requests for items) and all the others were on matters of little or no relevance to this thesis (e.g. a dissertation on the effectiveness of a high-probability request sequence as a means of increasing compliance with medical examination tasks, and a quantitative examination of the effectiveness with young children – some with autism – of a procedure used to investigate imperative communication in gorillas). *I can find no publication referencing Wootton's thoughts on autism.*

and in others it is an understanding gained from an earlier conversation. In Wootton's view, such understandings have three crucial properties i.e., they are 'local', 'public', and 'moral', by which he means that they can only be understood in the context of things that have occurred recently (local), they reflect an overt happening during an earlier interaction (public), and have the quality of accountability (moral). Wootton notes that:

local understandings are central to the young child's emerging grasp of the world of everyday life in which her linguistic behavior is situated. Through recognizing their existence, the child's sensitivity to the 'context'¹⁹⁷ in which she acts undergoes an enormous developmental step.
(*ibid.*, p. 9)

He stresses that, although not discounting an involvement in the child development process of the application of scripts learned from previous interaction, he is not talking about scripts learned from previous situations and applied in appropriate circumstances in the future but about understandings gained from *particular instances of talk-in-interaction*. The impact of scripts on the development process is felt to be a weak one because of the range of different ways in which a typically developing child is able to make a request; something that Wootton feels cannot be explained by the application of a script which could not account for the subtle differences between individual requests and the interaction leading up to them.

To give an example of how a request reflects a prior understanding I quote, in full, Wootton's CA fragment of conversation number 3.3 recorded when Amy was 2 years 5 months old (in the fragment, A is the child Amy, and M is Amy's mother). In this fragment – involving an interaction relating to the use of chalks on a chalk board – Amy asks her mother if the mother wants some chalks (Line 1), her mother indicates that she is happy to do some chalking (Line

¹⁹⁷ For me this is a key point as one could replace Wootton's 'context' with Searle's 'Background' (or the Bourdieuan concept of the 'habitus' if preferred) i.e., this could be an important insight as regards the development in the young child of individual dispositions, a feature of the development of an autistic child that may be impaired because of the difficulty in developing local understandings in Wootton's terms.

3), at which point there is a topic change when Amy refers to the magazine her mother is holding (Line 4), and then after that *reverts to talking about chalks for her mother* (Line 14). At age 2;5 the child ascertains that her mother is willing to do some chalking with her, holds that understanding in mind whilst she changes the subject, and then follows up the understanding. Wootton subsequently writes that:

my interest in imperatives, in their own right, is less important than the nature of the sequential understandings to which they seem to be related. In this respect two principal claims *are* being made. First, that, within a variety of sequences, there is a range of internal evidence [including conversation fragment 3.3, NC] that imperatives are connected with certain types of preceding understanding. Second, that other available request designs are not generally used in parallel circumstances, and that the circumstances where they *are* used are not ones in which imperatives are normally used. The crucial implication of this, it seems to me, is that in making a request selection the child is taking into account, routinely, though not in a deterministic fashion, the nature of the local sequential understanding that obtains.
(*ibid.*, p. 84, author's italics)

3.3 2;5/III 35:58

About 10 seconds earlier Amy's mother, at Amy's request, has resumed her seating position close to the chalk board. M continues to look at a magazine that she is holding:

- 1 A: Want some chalks?^A
 2 (.7)
 3 M: Can I do some chalking now?
 4 A: Yeh (.) And put that paper down in the (room) ((gesturing
 5 to floor with her left arm))
 6 (.6)
 7 M: Just^B down here? ((moving paper to floor as she says this))
 8 A: Yeh
 9 M: O kay
 10 A: And (save hh them in a minute) ((getting seated in her
 11 chair as she says this
 12 M: No:w
 13 M: Okay=

- 14 A: =And get some chalks (.) there for you ((passing box to M
15 as she says this))
- 16 M: Can I have this one here? ((picking up and showing A a
17 chalk here))
- 18 A: Yeh? (.) Now I want some? ((taking box back from M as
19 she says this))

This fragment clearly shows that Amy has the capacity to recall her mother's publicly stated preference to do some chalking with her; *hence there is no need for the child to 'mindread' when her mother's stance can be gleaned from an earlier part of the conversation.* It may be that 'mindreading' is not as important a feature of the developmental process as writers such as Baron-Cohen and others suggest it is (Baron-Cohen, 1995). With the research in respect of his typically developing daughter in mind, Wootton writes of autism as follows:

The interaction patterns of the autistic child are radically disturbed across the range of contexts in which normal children participate, including request contexts. In particular, *if the child is engaging in little request initiation then there is going to be little scope for ever recognizing that conduct can be designed so as to take account of sequentially based understandings.* If this site is, as I have argued, an important one for developing a working acquaintance with such understandings, then *the pattern of interactional involvement displayed by the autistic child will have as its corollary a radically diminished acquaintance with the practice of taking other people's views into account.* So, while there will almost certainly be neurological and early developmental predisposers to autism, ones which may well be causally distinctive to this condition, the specific bases for the impairment in taking account of the mental states of other people may lie in the relative absence of normal patterns of later behavior. If it is through activities such as requesting that the normal child develops a working, practical skill in taking account of the preferences of other people, then *it seems likely to be the lack of this interactional experience which could underpin the much diminished skills of the autistic child* in this regard.
(ibid., p. 92, my italics)

This theory of autism – which one might describe as an 'interactional practice' theory of autism – seems to me to respond to many aspects of autism. I agree with Carpendale and Racine that, when taking a relational approach, the problem of understanding other people's

perspectives and attitudes does not require a mind reading capacity, however achieved, but is developed in interaction; they write that ‘rather than perspective taking developing through simulation, theory or insight, or innate modules, we suggest that this development is grounded in the infant’s experience of interaction with others, and in this context others’ attitudes are manifest in interaction – no mind reading is needed’ (Carpendale and Racine, 2011, pp. 352-353). However, this is not the time or place in which to undertake an in-depth analysis of the extent to which Wootton’s theory explains the symptoms of autism. I note, in particular, Wootton’s reference to a ‘diminished acquaintance with the *practice of taking other people’s views into account*’ (ibid., p. 92, my italics) in autism and now move on to review Daniel Hutto’s narrative practice hypothesis (Hutto, 2003b; 2007; 2008; 2009b) which appears to me to be closely linked with the interactional practice theory just outlined.

Narrative Practice Hypothesis

Hutto is sure that there is no need for an innate, hard-wired ToM ability in human beings because typically developing individuals develop an understanding of folk psychology¹⁹⁸ through continuous exposure during the formative years to stories that teach them about folk psychological practice. He puts it this way: ‘Encounters with narratives about those who act for reasons best explain the origins of folk psychological (FP) abilities, both phylogenetically and ontogenetically. Such stories familiarise us with the forms and norms of folk psychology. This is the core claim of the Narrative Practice Hypothesis (or NPH)’ (Hutto, 2007, pp. 47-48). Hutto considers, as I do, that the Narrative Practice Hypothesis (NPH) provides a challenge to both theory theory and simulation theory (discussed in Chapter X), could be integrated with either (or both, since various authors argue for combinations of theory theory and simulation theory), but is ‘better suited to ally unprincipled, non-

¹⁹⁸ Folk psychology, or commonsense psychology, is the natural capacity to explain and predict the behaviour and mental states of other people.

representational proposals about the character of rudimentary forms of social interaction and understanding, such as Gallagher's interaction theory' (Hutto, 2008, p. 186).¹⁹⁹ With the NPH, FP practice is not theory-driven and 'no theory of mind ... guides, informs or explains it. Acceptance of the NPH also rules out the possibility that FP-competence proper will reduce to a kind of simulative activity' (ibid., p. 175). Instead, the NPH claims that typically developing children develop an understanding of FP by experiencing particular kinds of narrative, namely 'socially supported story-telling activities' (ibid., p. 177) i.e., narratives that teach children about mental states such as beliefs and desires. Exposure to social stories is 'the developmentally normal pathway through which children come by their FP-competence' (ibid., p. 178).

Sensorially disturbed interaction hypothesis

In her paper entitled *Psycho-practice, psycho-theory and the contrastive case of autism*, Victoria McGeer proposes that sensory disturbances may lie at the heart of autism (as well as deafness and blindness) in that 'Being excluded from the regulative influences of other people, autistics [and deaf and blind people, NC] will not develop habits of agency that conform to shared norms of what it is to experience, think and act in recognizably normal ways' (McGeer, 2002, p. 129) – which, in autism, could account for a failure to develop

¹⁹⁹ I believe that the Narrative Practice Hypothesis sits well with Wootton's theory (which, given the similarity between the latter and interaction theory, is consistent with Hutto's contention that the NPH is compatible with interaction theory. As I understand it, the key difference between Wootton's theory and interaction theory is that, for Wootton, intersubjective understandings are the result of talk-in-interaction rather than perceptually-based. Of course, the similarities between the Wootton theory and interaction theory suggest that they could be combined into a hypothesis involving development of understanding of others through both talk and direct perception. Gallagher writes that 'interaction is primarily perceptual and contextual' (Gallagher, 2008, p. 167). The reference to context echoes Searle's 'Background' (or Bourdieu's 'habitus'). Could it be that talk-in-interaction, perception and context could be linked in a theory of autism whereby Kanner's 'autistic aloneness' and lack of interest in others results in an incomplete 'induction' into intersubjectivity because autistic children engage in far less interaction with their peers and carers than is the case with typically developing children leading to difficulties with pragmatic language and with interpreting body language (including reading the mind in the eyes), and a stunted development of their Background (habitus)?

typical practical sociological reasoning²⁰⁰ – as well being ‘cast back on their own resources for managing their sensory experiences perhaps by reducing, repeating or drowning out incoming sensory stimuli in ways they can control’ (ibid., p. 129) – which could account for a range of typically autistic symptoms such as repetitive and self-stimulatory behaviours. McGeer writes that her speculations suggest that ‘becoming minded as others are minded, and sharing thereby in the advantages of normal psychological knowing, may finally depend on something as basic as having sensory access to others in a way that makes possible their regulative influence on us as developing children’ (ibid., p. 129) which, if correct, would reconcile the focus of autistic autobiographical accounts of sensory sensitivities with the focus of PNT clinicians and researchers of autism on the social difficulties seen in autism. She proposes that people become minded as others are minded, not by reading other minds, but by learning and following behavioural norms that make us readable by others. With this hypothesis ‘much of the work of understanding one another in day-to-day interactions is not really done by us at all, explicitly or implicitly. The work is done already and carried by the world, embedded in the norms and routines that structure such interactions’ (ibid., p. 119). In this sense then, McGeer considers that becoming an effective psycho-practitioner (or, using the language of ethnomethodology, learning an effective range of practical sociological reasoning skills) is just the same as ‘becoming a native speaker within a linguistic community’ (ibid., p. 120). She stresses that the skills involved in becoming proficient as a psycho-practitioner and in a native tongue are inextricably linked; people cannot achieve one without the other because ‘so many of our methods of being comprehensibly minded are embedded in the semantics and pragmatics of our language’ (ibid., p. 120).²⁰¹ Boucher has

²⁰⁰ In her article McGeer refers to psycho-practical expertise rather than to practical sociological reasoning but I suggest that the two are, effectively, one and the same concept.

²⁰¹ If I understand McGeer correctly, she contends that, in the same way that we learn first language skills through speaking and listening, we learn psycho-practical skills by applying shared norms in our own actions (including speech acts) and reading others’ application of shared norms in their actions. It might be helpful to refer to psycho-practical expertise as ‘*native reasoning*’ to reinforce McGeer’s analogy with learning a native

suggested that sensory-perceptual impairments may be the cause of *language impairments* in autism and that such a hypothesis is compatible with a further hypothesis relating to the psychological causation of autistic language impairments – namely, the existence of time-parsing deficits – that she sought to revive, and which I now turn to (Boucher, 2003).

Time-parsing deficit hypothesis

Boucher refers to the fact that ‘An earlier hypothesis concerning the psychological cause(s) of language impairment in autism suggested that there is a fundamental deficit in the ability to process transient, sequential stimuli (i.e. stimuli with a temporal dimension) such as speech or manual signing’ (Boucher, 2003, p. 250) which she attempted to revive in the slightly different form of a ‘time-parsing deficit’. With this theory of autistic language impairment, Boucher claimed that autism involves varying levels of difficulty in the understanding of conversation exchanges (or signing) in real time ‘which contributes to the linguistic aspects of their pragmatic impairment’ (ibid., p. 250). She considers that the extent of the difficulty in parsing conversation is dependent on where a person lies on the autism spectrum. Boucher argued that the lower a person is on the spectrum, the shorter the duration of conversation that would become difficult to understand so that persons with AS might have difficulty with the parsing of relatively long stretches of conversation²⁰²; persons with ‘classic’ autism and good language skills may experience difficulty with shorter lengths of conversation such as

language. In pointing to the close connection between the learning of psycho-practical and language skills, McGeer’s theory of autism suggests, by implication, that autistic ToM deficits may be due to a failure to fully develop PNT social interaction (psycho-practical) and communication skills instead of vice versa. Whilst the evidence in support of deficits in areas such ‘reading the mind in the eyes’ in autism is highly persuasive, there appears no proof that such deficits precede social deficits in the causal chain.

²⁰² The time-parsing deficit and sensory-perceptual hypotheses resonate with me for personal reasons. When chairing meetings I have always had difficulty in keeping track of the direction of the conversation (particularly as it appears to be a PNT tendency for people to digress from a discussion topic). This has always required intense concentration; I suspect more intense than would be required of a PNT chair person. An example of difficulty with time-parsing *and* sensory-perceptual overload was my involvement – as a participant – in a workshop using a technique requiring participants to listen to a speaker and input comments via computer keyboard on what the speaker had said and on comments input by other participants on the points made by the speaker. Whilst no-one else appeared to have any difficulty with this (I asked a couple of my colleagues for their thoughts on this after the workshop), I had to concentrate on reading and commenting on others’ comments, *totally ignoring the speaker*. That was as much sensory input as I could manage!

sentences; those with limited language may have trouble with individual words and morphemes; and persons with no language would have problems with the time-parsing of syllables and phonemes. This author contends that the time-parsing deficit hypothesis can explain the full spectrum of language dis/ability in autism as well as apparent links between language impairments in autism and other developmental disorders such as dyslexia (ibid.).

Enactive mind hypothesis

The enactive mind (EM) hypothesis is more of a theoretical framework for understanding autism than an actual theory of autism with Klin et al. writing of EM as ‘a framework different from the prevailing computational models of social cognitive development’ (Klin et al., 2003, p. 357) involving ‘disembodied cognition’ where cognition and action are separate. The key aspect of the EM hypothesis is that, instead of a child’s mind consisting of certain innate capabilities which are gradually given rein, the mind is an ‘*active mind* that sets out to make sense of the social environment and that changes itself as a result of this interaction’ (ibid., p. 348, my italics). Unlike the disembodied cognition associated with computational models, with an active mind cognition and action are inextricably linked in the typically developing child *but apparently not in the autistic child* (ibid.).

As Klin et al. state at the beginning of their article on the EM framework, they initially set out to understand why there is such a gulf between the ability of many autistic individuals to figure out a social problem when given the details of it in a research context and their general inability to do so ‘in more naturalistic situations’ (ibid., p. 345). These authors point out that although even the most intellectually able autistic persons may not be able to fully understand the nuances of a social situation in a research situation, nevertheless, they can often solve such problems at a level out of all proportion to their inability to react appropriately in the

‘cut and thrust’ of day-to-day social interaction. To explain this major discrepancy they consider it is necessary to use an alternative framework centred around:

a different set of social cognitive phenomena, for example people’s predispositions to orient to salient social stimuli, to naturally seek to impose social meaning on what they see and hear, to differentiate what is relevant from what is not, and to be intrinsically motivated to solve a social problem once such a problem is identified. [Their framework] is called EM in order to highlight the *central role of motivational predispositions to respond to social stimuli* and a developmental process in which social cognition results from social action.

(ibid., pp. 347/348, my italics)

Klin et al. argue that the embodied social cognition in the typically developing child is, to use their term, ‘derailed’ (ibid., p. 355) from very early in the life of the autistic child because in autism social phenomena do not have the salience they have for the predominant neurotype. In putting their EM hypothesis forward, these authors cite as evidence, inter alia, the attention differences often seen in autism such as a young autistic child’s failure to follow a pointing gesture, and a tendency for eye gaze in autism not to follow the verbal and non-verbal gestures in a social interaction but to spend unusual amounts of time on something of a non-salient nature, an inanimate object or the mouths of the protagonists instead of their eyes. According to Klin et al., this is due to *the fundamental motivational predispositions to orient to, understand, and respond to social stimuli in autism being derailed* (ibid.).

Enhanced perceptual functioning model

The University of Montréal team led by Laurent Mottron have proposed a perception-based model of autism described as the ‘enhanced perceptual functioning (EPF) model’ (Mottron and Burack, 2001; Mottron et al., 2006) along with a set of eight principles of autistic perception (Mottron et al., 2006). The latest version of the EPF model takes account of the researchers’ realisation ‘that a *primary* superiority in perceptual analysis could possibly

underlie both local biases in hierarchical perception and construction, and exceptionally accurate reproduction of surface properties of the world, like 3-D perspective or absolute pitch values in savants' (Mottron et al., 2006, p. 28, authors' italics). In developing their model Mottron et al. retained the concept of local bias from the WCC theory (attributing it to superior perceptual functioning in autism) but regarding it as 'mandatory' in autism in opposition to Frith and Happé's view of local bias as a cognitive preference. The eight principles of autistic perception put forward by Mottron et al. are somewhat complex, however, they have provided a succinct descriptor for each of the first six principles so, as I do not have the space to delve into the principles in any depth in this thesis, the principles and descriptors are included in Table 10 below. I have listed the principles in the same order as they appear in the Mottron et al. article as the authors 'presented (them) in order from what we estimate are the most consensual, to the most speculative' (ibid., pp. 29-30).

Table 10 – Mottron et al.'s eight principles of autistic perception

Principle	Descriptor
1. The default setting of autistic perception is more locally oriented than that of non-autistics	Locally oriented processing
2. Increased gradient of neural complexity is inversely related to level of performance in low-level perceptual tasks	Enhanced low-level processing
3. Early atypical behaviors have a regulatory function toward perceptual input	Early lateral glances
4. Perceptual primary and associative brain regions are atypically activated during social and non-social tasks	Superior involvement of posterior regions in multiple tasks
5. Higher-order processing is optional in autism and mandatory in non-autistics	Enhanced autonomy toward higher-order influences
6. Perceptual expertise underlies savant syndrome	Enhanced specialization or expertise level
7. Savant syndrome is an autistic model for sub-typing PDDs*	No descriptor
8. Enhanced functioning of primary perceptual brain regions may account for autistic perceptual atypicalities	No descriptor

* The current approach to sub-typing pervasive developmental disorders (PDDs) is the distinction between autism and Asperger's syndrome; according to the authors, an alternative approach to sub-typing PDDs is to distinguish between savants and non-savants.

(Extracted from Mottron et al., 2006, pp. 30, 31, 33, 34, 35, 37, 38 and 39)

In summary, Mottron et al. consider that their research demonstrates that 'perception plays a different and superior role in autistic cognition' (ibid., p. 39) than in PNT cognition. They stress, in particular, the local orientation of autistic perceptual functioning and their view that perceptual functioning in autism is *enhanced* in comparison to PNT perception such that 'the superior involvement of perceptual regions in so called "high-level" tasks *may be associated with a significant superiority of the autistic group*' (ibid., p. 40, my italics).²⁰³

Comparing EPF and WCC, Wendy Lawson writes that: 'Perhaps the only difference that comes to mind between the two theories is that EPF does not suggest a weak top-down central processing so much as a strong relationship between intact high-level processes alongside superior developed low-level perceptual processing abilities' (Lawson, 2011, p. 97). If my understanding of EPF is correct, Lawson might have referred to *enhanced autonomy* regarding intact higher-order processing rather than to *intact* high-level processes (but, of course, she may disagree with the enhanced autonomy point made by Mottron et al.). This is a relatively minor point but I am really struggling with some other points made by Lawson regarding EPF e.g. what is the point of the 'subliminal attention' concept she introduces (without further clarification) in the following statement; is she not at one and the same time arguing for a difference between EPF and her own approach *and* for both approaches involving "a processing resource that is not always within awareness"?

²⁰³ It is not entirely clear how the EPF model relates to the sensorially disturbed interaction hypothesis. Whilst it is clear that Mottron and his team consider that perceptual functioning is heightened in autism, McGeer and commentators on her hypothesis refer to a reduction in regulative influence and perceptual impairments. At first sight this might suggest that the McGeer hypothesis is the opposite of the Mottron model but it is possible that McGeer would regard enhancement of typically developing perceptual functioning as an impairment.

although Mottron et al. (2006) appear to suggest that EPF operates outside the mode of attention and is a perceptive dimension often not even noticed by the individual, the concept of attention used in this text [by “this text” I think Lawson is referring to her own book rather than the Mottron et al. article, NC] is of a processing resource that is not always within awareness. Therefore, attention is the resource being utilised, but this may be outside of the AS individual’s awareness or, in other words, ‘subliminal attention’ (i.e. attention below the awareness threshold) is in operation.
(*ibid.*, p. 97)

Lawson appears to suggest that Mottron et al. argue that the EPF they associate with autism gives rise to ‘the difficulties highlighted in many social situations that are outside an individual’s available script (e.g. difficulties in knowing how to respond when things don’t go according to plan or expectation or in times of social demand)’ (*ibid.*, p. 97). She continues by writing that “Wendy suggests AS individuals are homing in according to attentional and systemic areas of interest” which are at the heart of what she describes as ‘Single Attention and Associated Cognition in Autism (SAACA)’.

Single Attention and Associated Cognition in Autism

Lawson writes that EPF only accounts for some of the aspects of AS and puts forward her own Single Attention and Associated Cognition in Autism (SAACA) theory as one that can apparently explain “succinctly and concisely” all clinical aspects of AS to the extent that ‘it might be seen as a viable alternative’ to ToM, ED, WCC, and EPF (Lawson, 2011, p. 99). Her SAACA theory is grounded in a view that autistic people have a *monotropic* cognitive processing style involving ‘single attention and single channels for accessing and processing information’ (*ibid.*, p. 101) in comparison to the PNT *polytropic* processing style which enables easy switching of attention and the ability to cope with multiple information channels simultaneously. The SAACA approach is described as follows:

I know that for many of us [autistics, NC], shifting attention from an aspect of interest to one that we are not interested or invested in is very difficult.

However, in AS this is often the reason we prefer sameness and routine, and why we may even appear to have one sense that dominates another. I suggest we use single attention connecting with and processing information one step at a time, which is the monotropic disposition, as our default setting. Therefore, attention and the interest system will work hand in hand to create an *attention, interest, sensory-motor loop* leading to a cognitive style. (ibid., p. 101, my italics)

The concept of an “attention, interest, sensory-motor loop” based on monotropic single attention reoccurs on numerous occasions and appears to be the key element of Lawson’s approach (with “interest” being closely associated with the ‘special interests’ of persons with AS if not actually the same thing). On the basis of her arguments, and despite feeling that single attention (monotropism) is an important feature of autism it is difficult to accept monotropism as the foundation for an *explanation* of autism (Lawson describes it as the ‘foundation for SAACA’ (ibid., p. 101)) for the reason she gives herself i.e., that PNT individuals may also be monotropic and hence that monotropism is not unique to autism (ibid.). I also felt that Lawson overestimated the claims Mottron et al. make for their EPF model and consequently disagreed with her critique of EPF. Lequia has questioned the value of Lawson’s theory in the context of learning in autism, writing as follows:

While SAACA is an interesting perspective of learning in ASD, the contributions of this new theory to our understanding of learning are unclear when compared with other cognitive theories (i.e., Theory of Mind, Weak Central Coherence, Executive Functioning, and Enhanced Perceptual Functioning). (Lequia, 2011, p. 406)

Whilst writing that Lawson’s book ‘is an excellent reminder that interests, even when atypical or idiosyncratic, can offer numerous opportunities for engagement, to improve a person’s motivation to learn new skills’ (ibid., p. 408), Lequia also advises readers to ‘keep in mind that *the SAACA theory is unsubstantiated and has significant overlap with more*

respected theories such as theory of mind (ibid., p. 408, my italics). These comments seem not just to ‘damn with faint praise’ but to warn against taking the theory too seriously.

In summary, on my reading of *The Passionate Mind* (such an appropriate title for an attempt to explain autism) I felt that SAACA did not provide an adequate explanation of autism but had a very important contribution to make to the achievement of a better understanding of autism in stressing the *relevance of single attention / monotropism*; how relevant I could not then be sure without obtaining a better understanding of Lawson’s theory. It was at this juncture that I came across the paper Lawson had co-written with Dinah Murray and Mike Lesser on the single attention / monotropism theory that forms the basis of her book.

Attention, monotropism and the diagnostic criteria for autism

In their article with the above title, Murray, Lesser and Lawson investigate the current diagnostic criteria for autism in the light of their theory that autism has its foundation in single attention or monotropism. They contend the following:

1. Attentional differences (single attention) explain the ‘patterns of subjective experience reported by individuals on the autism spectrum’ (Murray et al., 2005, p. 139) including Roz Blackburn, Temple Grandin, Donna Williams, and Wendy Lawson herself.
2. The ‘restricted range of interests’ included in the DSM-IV and ICD-10 diagnostic criteria which they refer to as monotropism ‘is central to the autistic condition’ (ibid., p. 139).²⁰⁴
3. ‘Social interactions, the use of language, and the shifting of the object of attention are all tasks that require broadly distributed attention’ (ibid., p. 140) and are therefore adversely affected in autism, which in their view involves single attention / monotropism.

²⁰⁴ Whilst Murray et al. appear to equate the restricted range of interests criterion for autism in the APA and WHO diagnostic manuals with monotropism (Murray et al., 2005), Lawson writes that a monotropic cognitive processing style involves ‘single attention and single channels for accessing and processing information’ (Lawson, 2011, p. 101). Would it not have been better for Murray et al. to have described restricted interests as a *consequence* of single attention and single channels for accessing and processing information?

4. Instead of a preference for detail over wholes they argue for a state of heightened (hyper) awareness inside an 'attention tunnel' (ibid., p. 142) and lessened (hypo) awareness outside this tunnel which they consider leads to the unusual sensory sensitivities (hyper- and hypo-sensitivities) often seen in autism.
5. Apparently, concepts and boundaries between concepts may differ between the PNT and autism and because autistic boundaries between categories 'may not coincide with boundaries imposed by shared language' (ibid., p. 143) the 'quasi-automatic inferencing which the structured interrelated semantic categories of language make possible will not occur' (ibid., p. 143). I think they are saying that attentional differences between the PNT and autism may mean that the former have learned to make inferences from sensory input whereas there is a tendency for the latter to be 'stuck' in a world of sensations (they draw attention to Jordan's point about an autistic tending to be 'a phenomenologist, trying to learn from what is seen, heard, felt, smelt, rather than from what can be implied or inferred from these sensations' (Jordan,1990, p. 165). Of special interest to me is their linking of this with 'an enculturation process which entrains people in similar behaviours, which people on the autism spectrum tend to miss' (ibid., p. 143) which resonates strongly with me in connection with my thoughts on language-games.
6. In the context of social interaction Murray et al. suggest that the difficulties autistic people have in understanding non-verbal behaviours, developing age-appropriate peer relationships, and 'sharing' with others (the social interactional impairments listed by the APA and WHO) is because 'In social discourse people take turns in determining, moment by moment, the current common interest' (ibid., p. 147) which is generally a problem for a monotropic autistic person for various reasons including 'the patchy and partial awareness that results from monotropic focus' (ibid., p. 147).

7. That the difficulty an autistic child has in recognising the existence of others is also due to their monotropism in that such a child will only recognise another person 'engaged with fulfilling the interests which preoccupy that child. Otherwise the existence of other people, like the existence of everything outside the tightly focused monotropic attention tunnel, may not impinge at all' (ibid., p. 148).
8. The highly uneven profile of skills often seen in autism is due to the 'learning of a skill (entailing) having an interest in doing so, and because monotropism yields a very fragmentary view of the world' (ibid., p. 148).
9. Delay in, or total lack of spoken language, difficulty in initiating or sustaining a conversation, stereotyped and repetitive use of language, and idiosyncratic language (the social communicational impairments listed by the APA and WHO) 'can be traced back to monotropic perceptions and thought patterns that fragment understanding, so that features of the environment which seem obvious to people with diffuse rather than tightly focused attention may be entirely missed' (ibid., p. 150).
10. The authors write that '*Unless language becomes an object of interest it will take monotropic individuals longer to realize that language is meaningful. Necessarily, it will take longer to learn how to use language effectively in a conversation*' (ibid., p. 150, my italics). Also, in their view, sensory sensitivities may affect the acquisition of language i.e., in the case of hypo-sensitivity the stimulus may not be registered and in the case of hyper-sensitivity the stimulus may overwhelm and result in avoidance action.
11. The final point from the Murray et al. article I wish to draw attention to (pun unintended) is, in essence, a summary of the difficulties autistic persons have with language-games; their point being that 'The rules of discourse are fluid, complex, unclear, inexplicit and charged with shifting social meanings ... It is painfully difficult for monotropic individuals to learn (these rules)' (ibid., p. 151). Whilst disagreeing with Murray et al.

over the existence of “rules of discourse” that can be learned (or perhaps, more correctly, over the existence of any explicit rules of discourse), I want to stress the underlying point that language-games are especially difficult for monotropic individuals to learn.

A synthesis of various theories of autism

I cannot accept the mind / body dualism. Without this dualism there is no need for ToM because, as Leudar and Costall write (following Hilary Putnam) ‘language and reality are not autonomous, but “interpenetrate” each other’ so one should ‘abandon epistemic dualism and accept that intentionality and behaviour are not different in kind but aspects of the same phenomenon – activity’ (Leudar and Costall, 2004, p. 616). Jost writes that ‘An important consequence which Wittgenstein’s insights may have for developmental psychology is that certain ‘psychological’ capacities, for instance the ability to ‘theorize’ about the mental states of others ... may not be individual cognitive achievements so much as *social and linguistic ones*’ (Jost, 1995, p. 18, my italics). From consideration of Wittgenstein’s thinking²⁰⁵ and the developmental psychopathology of autism, Hobson states that ‘our knowledge of other persons-with-minds has no lesser status as knowledge than our knowledge of sticks and stones that break our bones. A fortiori, we do not need to “theorize” about the nature of people’s perceptions, feelings, intentions and the like’ (Hobson, 2009, p. 246). Eigsti et al. express the view that ToM has ‘(not) been found to account for symptoms of ASD across each of the three domains’ (Eigsti et al., 2011, p. 684).²⁰⁶ I do not dispute that difficulties with reading the mind in the eyes are real but do not regard them as ToM related. Furthermore, failure to fully develop ToM is not the only socio-interactional aspect to autism; there is also a failure to develop the ‘socio-cultural acumen ... needed to establish and

²⁰⁵ I believe that three of the four authors from whom we can learn most about autism – Asperger, Beckett, and Wittgenstein (the fourth being Leo Kanner) – probably had what we now know as AS and hence had special insights into autism or into phenomena within which autism is reflected.

²⁰⁶ This is a reference to the triad of impairments in autism.

maintain a developmentally appropriate peer relationship' (Ochs et al., 2004, p. 155).²⁰⁷

Ochs et al., following Malinowski, refer to the need for an individual engaged in social interaction to understand the 'context of culture' in addition to the 'context of situation' i.e., the socio-cultural perspective as well as the interpersonal perspective to communicate effectively (ibid.). Autism theory must allow for the effects of a failure to develop both.

But how *can* the difficulties people with autism have with false belief tests and the 'reading the mind in the eyes' test be explained? Smukler and Ferguson make the interesting point that so-called ToM is defined very broadly but tested very narrowly (through evaluation of ability to understand false beliefs) (Smukler and Ferguson, 2005). Some authors now say either that false belief tests do not test understanding of others (ToM)²⁰⁸ or that ToM involves a lot more than just understanding false beliefs (Bloom and German, 2000). Beardon considers that ToM skill deficits are not the preserve of autistic people since it can be argued that PNTs have as much difficulty 'reading' autistics as vice versa.²⁰⁹ So-called ToM is a cross-neurological boundary issue in my view, *not* an autistic phenomenon. Ironically, it appears that persons with autism actually rely on theorising and simulation²¹⁰ to a *greater extent* than PNT people due to the difficulties autistic people have with direct perception (reading the

²⁰⁷ Ochs et al. write that 'the ability to recognize, interpret, and respond to speech acts involves socio-cultural perspective-taking, minimally including an awareness of (1) the socio-cultural conventions for performing such acts; (2) the social roles being enacted by the performers; (3) the social activities in which the acts are both embedded and which they help to constitute; (4) the default knowledge states, beliefs, emotions, and intentions conventionally associated with performers of such acts; and (5) the possible, anticipated, and preferred next interactional moves conventionally projected by the performance and performers of these acts' (Ochs et al., 2004, p. 156).

²⁰⁸ For example, Bloom and German consider that there is more to passing the false belief task than theory of mind and more to theory of mind than passing the false belief task! They say, 'It might be that developmental psychologists are so obsessed with the false beliefs task just because it is the one measure of theory of mind that children are not very good at' (Bloom and German, 2000, p. B29) and conclude their paper with the considered opinion that the false belief task 'is an ingenious, but very difficult task that taps one aspect of people's understanding of the minds of others. Nothing more, nothing less' (ibid., p. B30).

²⁰⁹ I first heard Beardon refer to ToM difficulties being cross-neurological in a National Autistic Society/Sheffield Hallam University Postgraduate Certificate in Asperger Syndrome course lecture.

²¹⁰ This is a reference to the theory theory and simulation theory variants of ToM.

mind in the eyes and body language) requiring them to fall back on intellectual (inferential) means of understanding other people when direct means of doing so fail them.

The ED hypothesis is vague and any dysfunction there may be in planning, working memory, impulse control, inhibition and mental flexibility, as well as for the initiation and monitoring of action is (a) not apparently found in all persons with autism, and (b) found on occasions in PNT individuals. On the former Hill writes that:

For the executive dysfunction account of autism to be valid as a cognitive account of the primary symptoms, these difficulties must be a universal feature of autism, that is they must be a characteristic of every affected individual. *To-date, a handful of studies have found that their tests of executive function have not identified deficits in participants ...* although this might simply be a function of the measures selected for these studies and thus the universality of executive dysfunction in autism cannot yet be ruled out.
(Hill, 2003, p. 6)

In the context of language impairments in autism, Eigsti et al. point out that, although pragmatic difficulties have been observed in many studies, it is equally the case that one sees such difficulties in studies of individuals with intellectual disabilities *but no autism*. In considering the possible cause of these difficulties in autism, the authors write that ‘there is little specific evidence to support a specific role of EF [executive function, NC] in pragmatic abilities (and some evidence against it ...)’ (Eigsti et al., 2011, p. 684). Of course, it is quite possible that EF deficits in autism purported to have been found by other studies may also just be a function of the participants and/or measures selected and so it is clear to me that EF may not be a necessary precondition for *pure* autism²¹¹. A further nail in the EF theory coffin is the likelihood that a capacity problem is not created by an EF deficit but arises from the extent of the effort required of autistic people in ‘working people out’ in normal social

²¹¹ By “pure autism” I mean autism without a co-morbid intellectual disability.

interaction. The difficulties they experience in trying to understand the intentions and emotions of other people, in comparison to the relative ease with which PNT people manage this, presumably requires a significantly greater amount of their total mental capacity *which may appear to be an EF deficit but actually may not be this at all but an ‘overload’ caused by additional demand.*²¹² It is possible that ‘narrative disruption on perception’ (Belmonte, in (Ed.) Osteen, 2008, p. 169)²¹³ may give the appearance of EF.

WCC would now appear to be regarded by its originators as a cognitive preference²¹⁴ rather than a weakness (as a strength in understanding detail can exist alongside a strength in global processing and some autistics – those with cognitive strengths in both detailed *and* holistic thinking – may even be cognitively superior to the PNT)! (Happé and Frith, 2006)

If there is no need for a ToM explanation of autism, an absence of evidence that ED is a universal feature of autism, and WCC is a cognitive preference, there is clearly a need for some other theory (or complementary theories) to explain autistic differences. Belmonte writes that the autism research community has a tendency to set competing theories of autism against each other ‘instead of seeking synthesis’ (Belmonte, in (Ed.) Osteen, 2008, p. 171). It is my aim to try and develop a synthesis of the various theories reviewed earlier.

Wootton suggests that sequential structuring of talk-in-interaction lies at the heart of a child’s understanding of other people (Wootton, 1997), which reflects Putnam’s view that language and reality ‘interpenetrate’ each other. He notes that:

²¹² The point about the difficulty autistic people have in understanding other people giving the appearance of an executive functioning deficit is made by Beardon. I first heard him say this in an NAS/SHU course lecture.

²¹³ Belmonte regards ‘weak central coherence and executive dysfunction to be two sides of the same coin’ (Belmonte, in (Ed.) Osteen, 2008, p. 169). I mention his view of WCC under the next numbered paragraph.

²¹⁴ Some scholars consider both inferior *and superior* performance in autism to have a pathological cause. Strangely, it is difficult to find anyone proposing such a cause when either is observed in a PNT person.

local understandings are central to the young child's emerging grasp of the world of everyday life in which her linguistic behavior is situated. Through recognizing their existence, the child's sensitivity to the 'context' in which she acts undergoes an enormous developmental step.

(*ibid.*, p. 9)

It is my belief that the majority of the *language method problems* in autism arise from a lack of social interactional experience – including talk-in-interaction – arising from the tendency to aloneness (avoidance of social interaction)²¹⁵ identified by both Kanner and Asperger which, in turn, may be caused by problems with regulation of perception, information processing, and emotion as described by Chamak et al. (Chamak et al., 2008). The problems with regulation could include a problem in processing transient, sequential stimuli, manifesting itself in a difficulty in processing conversation described by Boucher as a specific language impairment²¹⁶ (Boucher, 2003). A lack of social interactional experience affects a child's development of language (especially pragmatics)²¹⁷, their development of an understanding of other people (interaction theory), development of folk-psychological practice (the NPH), and ability to learn behavioural norms (the sensorially disturbed interaction hypothesis). It would seem, therefore, that interaction theory, the NPH, and the

²¹⁵ Hypothesising that the problems of autism arise from a lack of social interaction caused by a tendency to avoid other people begs the question as to what causes that tendency. Belmonte argues that autism results from 'a general disruption of narrative organization' (Belmonte, in (Ed.) Osteen, 2008, p. 171) caused by 'a response to rejection by one's own internal cognitive and perceptual environment, an environment whose limited capacity for narrative modeling (sic) often cannot encompass the complex and incompletely scripted phenomena of social interaction' (*ibid.*, p. 171). His case is cogently argued including explanations for various strengths and weaknesses in autism, the link with sensory sensitivities, and the obsession many autism theorists have with ToM which 'stands out as an especial deficit only because it is so frequently applied during normal social interaction' (*ibid.*, p. 171). I believe my synthesised theory to be consistent with Belmonte's views.

²¹⁶ Eigsti and her colleagues consider that the research they reviewed suggests that the language difficulties in autism are not just due to problems with social interaction but imply specific language deficits (Eigsti et al., 2011). Whilst I believe that social interactional differences are fundamental to autism, I accept that there may also be language difficulties not directly associated with social interactional differences. Boucher's hypothesis may be a consideration here (Boucher, 2003). Nevertheless, as language is 'not *added* to social life to facilitate communication, as though language were simply a *means* to express something apart from itself' (Keightley, 1976, cited in Newman, 1996, p. 301, author's italics) but an integral part of social interaction, in my opinion language difficulties do not necessarily presuppose a language disorder such as that described by Boucher.

²¹⁷ Newman points out that Wittgenstein sees language 'as part of a social whole' (Newman, 1996, p. 301) quoting Pitcher's slightly different, but essentially similar, take on this whereby 'linguistic and non-linguistic behaviour are woven together into an intricate organic whole' (Pitcher, 1964 cited in Newman, 1996, p. 301).

sensory disturbance theory might all have relevance as regards the development of the socio-cultural acumen referred to by Ochs and her colleagues (Ochs et al., 2004). In this way a number of existing theories of autism might interlink to cause *language methods effects* in autism and thus combine aspects of autism as experienced by autistic people themselves (i.e. sensory sensitivities, and difficulties with processing information and emotions) with aspects of autism as experienced in interaction with autistics by PNTs (the social interaction, communication, and imagination problems enshrined in the diagnostic criteria) in addition to failure to develop socio-cultural acumen and interpersonal skills (Chamak et al., 2008; Ochs et al., 2004).

The authors of the single attention (monotropism) theory regard single attention as being the foundation for all the interactional, communicational, and imaginative aspects of autism. Importantly, through the concept of an ‘attention tunnel’ – involving heightened (hyper) awareness within the tunnel and lessened (hypo) awareness outside the tunnel – this theory puts forward an explanation for the sensory sensitivities often associated with autism that other theories have not been able to explain (Murray et al., 2005).²¹⁸ According to McGeer the learning of norms (which would include language methods and language-games) can be disrupted by the kind of sensory disturbances often seen in autism (McGeer, 2001). Murray et al. write that ‘Unless language becomes an object of interest it will take monotropic individuals longer to realize that language is meaningful. Necessarily, it will take longer to learn how to use language effectively in a conversation’ (Murray et al., 2005, p. 150).

With her time-parsing deficit hypothesis, Boucher claims that autism involves varying levels of difficulty in understanding conversation exchanges (or signing) in real time with the extent

²¹⁸ An explanation of the sensory sensitivities often noted in autism would enable the reconciliation of autistic autobiographical accounts that tend to focus on sensory sensitivities with the attention given by clinicians and researchers to the social difficulties seen in autism.

of difficulty in parsing conversation dependent on where an individual lies on the autism spectrum. Clearly, difficulty in parsing the words used in real-time conversation would affect the development of an understanding of language methods and their use in social context.

The NPH can explain the development of folk-psychological (FP) practice via the telling of stories (Hutto, 2008), a practice that would, presumably, be less well-developed in children who tend to avoid social interaction but might develop to a level much nearer that of TD children in those autistic children who have hyperlexia or, having a special interest in language, read more widely than their TD peers and develop FP understanding that way.

Interaction theory argues for direct access to other people through primary subjectivity and secondary subjectivity, which is lacking in autism due to a tendency for autistics to avoid social interaction (Gallagher, 2008). Does the enactive mind hypothesis – which proposes that autistic children lack the ‘active mind’ (or fully ‘active mind’) that may cause TD children to seek to make sense of their social environment (Klin et al., 2003) – explain the lack of saliency of social interaction in autism? Or could it be that the root cause of the difficulties associated with autism is the single attention (monotropism) discussed by Murray, Lesser and Lawson? (Murray et al., 2005; Lawson, 2011) Could these problems be exacerbated by a difficulty in time-parsing TD conversation in ‘real-time’?

The enactive mind hypothesis talks of *fundamental motivational predispositions to orient to, understand, and respond to social stimuli in autism being derailed* (Klin et al., 2003). So it could be that social matters just do not have the salience for the autistic individual that they have for the PNT. (Of course, that leaves unanswered *why* social stimuli do not have PNT levels of salience in autism.) Could it be that monotropism leads to social matters lacking

salience for the simple reason that for such matters to be salient for them an autistic has either to attend to the interests of others or have social matters as their special interest?²¹⁹

A lack of social interactional experience, for whatever reason, would affect the development of a person's individual abilities, dispositions, and tendencies i.e., their 'habitus' (Bourdieu, 1990) or 'Background' (Searle, 1995) (which is "acquired through our acculturation into certain social groups such as social classes, a particular gender, our family, our peer group, or even our nationality" (Fleming, undated) and hence depends upon social interaction).

As I have pointed out previously, 'language is 'not *added* to social life to facilitate communication, as though language were simply a *means* to express something apart from itself (Keightley, 1976, p. 46); rather language is recognized as a natural development of human behavior; indeed that it is *itself* behavior' (McGinn, 1984, p. 42, author's italics). It seems to me that difficulties with social interaction and communication would result in an autistic's 'own world' being substantially different from the 'own world' of the PNT so that at one end of the spectrum of what it is to have autism may be to be unaware of the social nature and purpose of language and, at the other end, to have a TD understanding of the 'rules' of *language* but not a TD understanding of *language-games*. So, at one autistic extreme a person can be mute, and at the other extreme they can be highly articulate but in a way that, to their PNT peers, shows they still don't fully 'get' language use.

Although a delay in developing language (or a total lack of language) is only presently a diagnostic criterion for 'classic' autism and not for AS, I believe that a delay in developing

²¹⁹ For the single attention (monotropism) theory to be accepted I think it is necessary to explain why single, monotropic attention could not be on social matters i.e., why would such attention *have to be* on something of a non-social nature? If monotropic attention was focused on the social would autism be less obvious? Might this explain the apparently predominantly male nature of autism (and the male-centric diagnostic criteria)?

certain aspects of *language use* and understanding of *language-games* is a feature of both autism and AS, hence that both should be diagnostic criteria for *all* cases of autism. The diagnostic criteria relating to spoken language in classic autism are:

- a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
 - b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
 - c) stereotyped and repetitive use of language or idiosyncratic language
- (DSM-IV-TR, 2000)

It appears to me that, whilst with AS there may be no apparent delay in developing spoken language, the impairment in the ability to initiate or sustain a conversation with others, and stereotyped and repetitive use of language or idiosyncratic language included as criteria for classic autism are also observable. But perhaps more importantly, with both classic autism and AS there is *a delay in (or total lack of) the development of an understanding of language-games*. I have no wish to take part in the current debate over whether or not there should be separate diagnostic categories for autism and AS but do consider that the current diagnostic criteria for both do not adequately reflect the *social* nature of the language difficulties in both. As I see it, autism involves *a delay in, partial lack of or total lack of, the development of an understanding of the primary social use of language and the means by which language is used in the full range of specific social interactional situations (language-games)*.²²⁰

Having concluded earlier that it is not a contradiction in terms to combine a Wittgensteinian perspective with the development (or synthesis) of theory, the next stage of my research project is to take a Wittgensteinian perspective on autism theory in the next chapter.

²²⁰ I have deliberately used the DSM-IV-TR “a delay in, or total lack of” phrase although it appears to suggest there is either a total lack of something or that whatever it is achieved after a delay. A better form of words would allow for a feature never to be fully achieved. I suggest “a delay in, partial lack of, or total lack of”.

CHAPTER X

A WITTGENSTEINIAN PERSPECTIVE ON AUTISM

The limits of my language mean the limits of my world.
(Wittgenstein, 1922, § 5.6, author's italics)

In the previous chapter I sought to describe the so-called ToM theory of autism, ToM being a reference to an individual's ability to attribute mental states to themselves and to others (Frith and Happé, 1999). I have already mentioned my dislike of philosophical dualisms (p. 18), referring to the 'refusal to buy into many of the dichotomies of traditional Social Science – objective/subjective; structure/agency, etc.' (Dewsbury et al., 2004, p. 154) that mark out ethnomethodological indifference to align myself with Dewsbury and his colleagues. There is, of course, a fundamental dualism behind the ToM explanation of the symptoms associated with autism; namely, the dualism of mind and body that is a corollary of the view that autistics are either unable to understand the minds of others or less able than are PNTs because 'other minds are hidden away [in a body, NC] and inaccessible' (Gallagher, 2008, p. 164). The mind and body dualism that underlies ToM makes me very uncomfortable; a discomfort that has set me on the search for an alternative to ToM despite the fact that almost every account of autism majors on it (e.g., Attwood, 1998; Bashe and Kirby, 2001; Bowler, 2007; Frith, 1991; Jordan, 1999; Wing, 2003) if not giving pride of place to it amongst the various competing theories of autism.

For me, an obvious question to ask is if the inability, or severely attenuated ability, to understand others is a core feature of autism (which, I hasten to add, it clearly is), how is it possible that many high functioning persons with autism are able to cope in society quite well? Whilst, naturally, appreciating why research focuses on trying to explain the difficulties autistics have with social interaction, in concentrating on weaknesses, research seem to me to have largely failed to consider how it is that high functioning persons with autism often manage as well as they do. I am well aware that an appearance of being able to cope with day-to-day living may hide a multitude of difficulties, and am not making light of the strain that even high functioning persons with autism are often under in simply getting through each day; simply trying to make the point that however much their interactional and communicational difficulties may loom large in their lives, a closer look will demonstrate – apparently paradoxically – that they often display a remarkably good understanding of other minds. How can this possibly be? To seek a possible explanation for the existence of ability to understand other minds in autistic people in addition to the well-known difficulties in mindreading associated with autism, the starting point is to note that there are various theories that compete with the theory theory and simulation theory variants of ToM i.e., interaction theory, which is not mentioned in the literature often, and Wittgenstein’s criteriological theory of mind which can almost be classified as a ‘lost’ theory.

Theory theory understanding of mind

It appears that the theory theory approach was first on the scene, theory theory being that ToM skills require individuals to use folk psychological *theory* to infer desires and beliefs in other people where the theory is simply an inferential mechanism based on a set of ‘rules’ developed from lived experience in the world. Slors and Macdonald write that:

By the end of the 1970s the idea that gaining access to the minds of others requires a theory was only natural. It was generally accepted that behaviourism

had failed and a new cognitivist paradigm had emerged. Cognitive psychologists began to posit internal mental episodes as causes of overt behaviour.

(Slors and Macdonald, 2008, p. 154)

According to Slors and Macdonald, the issue of how people develop an understanding of other minds consisted of a debate between competing versions of theory theory (which need not be considered for the current purpose). Gordon writes about theory theory that:

In short, according to (the theory theory) view,

(3) Our capacity for anticipating and explaining human behaviour depends primarily on our capacity to apply mental concepts.

(4) Our capacity to apply mental concepts depends on our possession of an implicit theory.

(Gordon, 2008, p. 220)

Simulation theory understanding of mind

In the mid-1980s a number of scholars independently introduced an alternative theory of mind known as simulation theory. The basis of simulation theory is that ‘we use our own minds as *models* of the minds of others in order to gain knowledge of the minds of others’ (Slors and Macdonald, 2008, p. 155, my italics); in other words an individual plays the circumstances another person is facing through their mind to ‘simulate’ that person’s mental state in order to understand current behaviour and predict future behaviour.

In comparison to theory theory, simulation theory does not require an actual theory of the workings of the mind, just an ability to represent or model another person’s state of mind in order to explain and anticipate behaviour. Gordon even goes as far as claiming that ‘(simulation theory) enables us to see how *mindreading may not be essential* or even particularly important to psychological competence’ (ibid., p. 220, my italics) in that the

‘mirroring processes [involved in simulation, NC] may *directly* influence our efforts to anticipate and to understand another’s behaviour’ (ibid., p. 221, author’s italics). And, in the context of the difficulty autistics have in reading emotions in others, it is interesting to note Gordon’s hypothesis that decision-making based on simulation need ‘not require that we recognize or categorize the emotion that registered on the other’s face’ (ibid., p. 221). So instead of the need for a specific *theory* of mind (theory theory) or even of a requirement for mindreading (simulation theory) the position is now – albeit it is only speculative – that an understanding of others may not always require recognition of intentional states.

Both theory theory and simulation theory are versions of an approach to social cognition that requires ‘theory of mind’, with the former involving the need for a person to evaluate the behavior of the other through the application of folk psychological theory and the latter requiring an imaginative simulation of what the other is thinking (Gallagher, 2008). One alternative to the approaches that require ToM is interaction theory which, according to Gallagher, avoids three suppositions that underlie theory theory and simulation theory:

1. An individual has to develop some sort of mental process to be able to read other minds, whether that be through a process of theorising (theory theory) or simulation (simulation theory) because it is impossible to obtain direct access to another mind;
2. The process of theorising or simulating what another mind may be thinking is the primary method individuals adopt to understand others;
3. In interaction with others people *observe* them from a third party perspective. (ibid.)

Conversely, *the* suppositions Gallagher considers to underlie interaction theory are:

1. Direct access to other minds *is* possible thus making the need to either theorize or simulate to read other minds redundant (although, as will be seen shortly, he

does not totally reject the existence of theorising and simulation) and is the primary method by which an individual understands what another person is thinking;

2. In interaction with others people *interact* with them from a second party perspective rather than observe them. (ibid.)

Reading *the mind* in the eyes: A Wittgensteinian perspective

Whatever ‘reading the mind in the eyes’ may involve, and I do not accept that understanding other minds requires either theory development or simulation, it is undeniable that the phenomenon of ‘mind blindness’²²¹ exists in some shape or form given the wealth of evidence, most particularly the results from the series of studies undertaken by Simon Baron-Cohen and his various colleagues involving the ‘reading the mind in the eyes’ test (e.g. Baron-Cohen, 1995; Baron-Cohen et al., 1997; Baron-Cohen et al., 2001). Given Baron-Cohen’s eminence in this field I shall base an initial description of mind blindness on his work. He writes that ‘The mind blindness theory of autism proposed that in autism spectrum conditions there are deficits in the normal process of empathy, relative to mental age’ (Baron-Cohen, 2001, p. 945) where empathy ‘involves two major elements: (1) the ability to attribute mental states to oneself and others, as a natural way to make sense of agents, and (2) having an emotional reaction that is appropriate to the other person’s mental state (such as sympathy)’ (ibid., p. 945). It seems to me (and it does not appear that Baron-Cohen has discussed this aspect of ToM in print), that as far as autism is concerned a deficit in element (2) would have to result directly from a deficit in element (1); in other words, if person A

²²¹ Boucher has defined “mindreading” as the ‘whole *range* of capacities and achievements relating to the understanding of minds in neurotypical individuals, from infancy through to adulthood’ (Boucher, 2012, p. 229, my italics). I think that Boucher’s “range” of mindreading skills in neurotypical (NT) individuals is a reference to a variety of such skills rather than a continuum of them in the NT population. I consider that there is a continuum of “mindsight” skills in the NT and autistic populations with an individual’s position largely dependent upon the extent and quality of their socio-interactional experience. The term “mind blindness” implies an absence of such mindreading skills which is quite simply not true of all autistics. In reference to an autistic person’s difficulties with mind reading I prefer the term “limited mindsight” to “mind blindness”.

fails to attribute a particular mental state M to person B they would be unable to have an emotional reaction to mental state M because there would be nothing for Person A to react to i.e., the primary deficit seems to be in element (1).

So a discussion of Baron-Cohen's element (1) is in order, the obvious first question being: what could result in an inability to attribute mental states to others when in interaction with them? Hobson writes that 'many psychologists appear to have neglected, or in some cases failed to grasp, the radical implications of what Wittgenstein has to say about the origins and nature of our psychological concepts' (Hobson, 2009, p. 243) and that 'anyone who seeks to understand autism would do well to read Wittgenstein' (ibid., p.256). On psychological issues like the one currently under consideration, and following Hobson, I agree with Wittgenstein that language-games can fool us into misinterpreting our use of mental state concepts (Wittgenstein, 1958). In her exposition of the *Philosophical Investigations* McGinn refers to Wittgenstein's 'concern with countering our false pictures of the nature of psychological phenomena through a *grammatical investigation* of how our psychological concepts actually function' (McGinn, 1997, p. 115, my italics), later on writing that 'The confusions that arise in the wake of these temptations [to misunderstand how language functions, NC] are overcome, Wittgenstein believes, by observing the differences in grammar and accepting them as revealing a distinction in the kind of phenomena our concepts describe' (ibid., p. 91). Such detailed observation of "differences in grammar" is what Wittgenstein called a 'grammatical investigation' (ibid.). Wittgenstein aims to:

reveal how our picture of visual experience as a special kind of presence to consciousness, which I try to indicate by staring fixedly ahead of me, is grounded in the mistaken idea of the grammar of the concept of visual experience. What Wittgenstein's grammatical investigation has revealed is not only that visual experience is not just a passive reception of visual data, but that the link between the concept of visual experience and certain patterns of *response* is much closer than we think

(ibid., p. 202, my italics).

What a person sees is not just a perception of whatever is in front of them visually; the overall visual experience for a person consists of the thing seen (the visual data) *and our response to it* (ibid.).²²²

Let us now consider the ‘reading the mind in the eyes’ test (Eyes Test) in a Wittgensteinian light. The Eyes Test is said to measure a person’s ability to attribute mental states to others. In the original version of this test the researchers showed 25 photographs of the eye-areas of various people to their study participants and asked them to choose the most appropriate of two descriptors of what the persons in the photographs were feeling or thinking (Baron-Cohen et al., 1997). In a later, revised version of the test the number of photographs was increased to 36 from 25 and a choice of four descriptors was provided instead of two to rectify various deficiencies in the earlier version (Baron-Cohen et al., 2001).²²³ Both studies led by Baron-Cohen found that high-functioning adults with either AS or classic autism are ‘significantly impaired’ (Baron-Cohen et al., 2001, p. 246) in their ability to interpret the expression in the eyes in the photographs in comparison with PNT controls but did as well as the PNT participants on a control test. The authors pointed out that the Eyes Test is a static test whereas in real life expressions change dynamically but that this limitation would make their test easier to ‘pass’ than a dynamic test, and hence their test would presumably tend to underestimate any impairment. What could cause autistic people to do less well than PNT individuals on the Eyes Test? Is it not the case that as both the autistic and PNT participants

²²² One of Wittgenstein’s methods of describing his view that our visual experience consists of our response to a visual experience in addition to the experience itself is through comparison of changes in visual experiences for a person *over and above* an objective alteration in the things being looked at. For instance, he shows us two different pictures (a face and a written word) and reverse images of both pictures. The reversal of the written word is seen to have a greater impact on the viewer than the reversal of the face not because the reversal of the word involves a ‘greater objective alteration’ (McGinn, 1997, p. 201) but because “of changes in how we respond” to the faces and words (we have a greater reaction to the reversal of the word). Neither the face nor the word is altered in any way other than being reversed but we *respond* more to one reversal than the other i.e., the overall visual experience for a person consists of the thing seen (the visual data) *and our response to it*.

²²³ For example, in the original Eyes Test participants had to decide between ‘reflective’ and ‘unreflective’ but in the later version had a choice of ‘reflective’, ‘aghast’, ‘irritated’, and ‘impatient’ (Baron-Cohen et al., 2001).

were shown exactly the same set of eye-region photographs that, by definition, both groups of participants must have had exactly the same visual experience (i.e., the objects they saw – the eye-regions – were no different between groups) and hence the difference in perception of the expressions in the eyes in the photographs must have been due to differences between their *responses* to the expressions? So, looking at the phenomenon from a Wittgensteinian perspective, it might be considered that there is a need to consider why the two groups would respond differently *even though they had exactly the same visual experience*. Is it a matter of differences in an ability to infer an emotion in an expression? McGinn writes that ‘Our sense that we do not really *see* the friendliness in a face, or that “He gave a friendly smile” is not really a perceptual report, is seen to lie in nothing more than a mistaken idea of how the concept of visual experience functions’ (McGinn, 1997, p. 204, author’s italics). She means that it is wrong to ‘think of visual experience in terms of a subject’s passive reception of what is given to a perceiving consciousness’ (ibid., p. 203). If an autistic person fails to *see* the friendliness in the eyes they are looking at maybe it is not that they miss something in those eyes that a PNT person can see but that *they respond differently to what they see*.

Does our response to an expression in the eyes of another (i.e., an attribution of a mental state) consist of the development of some kind of theory or a simulation of the emotion the expression projects? From a previous chapter I concluded that Hobson’s personal relatedness hypothesis obviated the requirement for any theory or simulation (Hobson, 1993, 2004, 2009). So what is a “response” in this context if not a theory or a simulation? I think that it is matter of ‘perceiving emotions in people’s bodily expressions’ (Hobson, 2009, p. 243) of which the eyes are only a part (albeit an important part) and that a lack of interest in people and social interaction from the early years in autism results in a *passivity* vis-à-vis learning typical responses associated with the predominant ‘form of life’ and hence to a lack of

practice in learning them. To me it is no surprise that atypical social development and atypical language and thought in autism (which are, of necessity, inextricably intertwined) lead to differences in autistic responses to other people in interaction including different responses to expressions in the eyes. Whilst the Eyes Test would appear to be a valid test of an autistic person's ability to 'read the mind in the eyes', a difficulty with this test does *not* in my view imply impaired ToM in the sense proposed by Baron-Cohen.

However, I believe that on an interpretation of Wittgenstein we might actually want to say that, not only is there no need for a ToM (and, hence, for an impaired ToM in autism as proposed by Baron-Cohen), but there is also no requirement to believe in a situation where mental acts take place in a mind whilst the person concerned speaks (or, alternatively, and more accurately, slightly before they speak). Pitcher explains Wittgenstein's view as follows:

Wittgenstein seeks to justify his view that, although several vital aspects of the workings of language seem to require mental acts or processes, this is actually not so. All that is actually required, in addition to the words themselves, is the behavior of human beings, the language-games which they play with the words. It is, in short, the use of words which gives them life. In use, they are alive.

(Pitcher, 1964, p. 280)

This appears to suggest that much study of ToM in autism is misplaced and that researchers should, instead, be spending a lot more of their time and resources in investigating the difficulties autistic people have in developing an understanding of language-games.

Is there an 'autistic' language-game and form of life?

Research question 4) is 'Do the features of autistic talk-in-interaction and autistic writing, whatever they may be, constitute a 'language-game' associated with an autistic culture or

‘form of life’?²²⁴ I shall first consider this question in the light of Wittgenstein’s concepts of ‘language-game’ and ‘form of life’ with a particular focus on Joyce Davidson’s article on online autistic culture from a Wittgensteinian perspective. I have considered Wittgenstein’s ‘private language’ concept from the perspective of autism – as it appears at first sight arguable that certain autistic individuals may have such a private language²²⁵ – but this may be to misunderstand a Wittgensteinian private language. I shall continue this chapter with some thoughts on private language both from the perspective of autism and, more importantly, from the wider perspective of children’s understanding of the mind. In this latter respect I wish to ‘revive’ Wittgenstein’s criteriological view of the mind (an alternative to the ‘theoretical’ view of the mind that involves both simulation theory and theory theory) and will conclude this chapter with an introduction to the criteriological view of mind – leaning heavily on Derek Montgomery’s paper entitled ‘Wittgenstein’s private language argument and children’s understanding of the mind’.

Various authors discuss the existence of an autistic culture either ‘online’ or more generally e.g., Broderick, 2008; Davidson, 2008; Jaarsma and Welin, 2011; Jurecic, 2007; Ortega, 2009. In her article on autistic culture and online communication, based on an extensive review of autistic autobiographies, Davidson writes of her conviction that the differences seen in the communication of people with autism justify treating autistic communication as a

²²⁴ A language-game cannot be autistic, only a person can be autistic; the autistic language-game I am referring to is a language-game that has developed in the way it has because it has been developed by autistic people.

²²⁵ Wittgenstein asks whether it is possible to ‘imagine a language in which a person could write down or give vocal expression to his inner experiences – his feelings, moods, and the rest – for his private use? – Well, can’t we do so in our ordinary language? – But that is not what I mean. The individual words of this language are to refer to what can only be known to the person speaking; to his immediate private sensations. So another person cannot understand the language’ (Wittgenstein, 1958, § 243). He uses the example of a person recording in a diary every instance of a certain sensation they feel using a private sign but, concluding that such a sign lacks meaning because there is no difference between applying the sign correctly and believing that one has applied it correctly, rejects the possibility of a private language (of sensations?). This is a difficult concept but I wonder whether (1) it is possible to have a private language relating to external things (as opposed to internal feelings and the like), and (2) whether Wittgenstein’s thinking on private language remained, somehow, influenced by his picture theory of language rather than his later view that the meaning of words depends on their use. This issue may have relevance to autism given that some autistics use ostensibly public language in a private way.

'language-game' that is becoming an autistic 'form of life'. She refers to 'distinctive autistic styles of communication ... associated with an autistic culture or "form of life" that is emerging alongside their practice, particularly online' (Davidson, 2008, pp. 791-792).

Wittgenstein introduces the concepts of a "language-game" and "form of life" in his *Philosophical Investigations* but the language in which they are couched makes them difficult to interpret (as many succeeding authors have pointed out); at no point does he include a definition of either term. In § 2 he writes that '(The) philosophical concept of meaning has its place in a primitive idea of the way language functions. But one can also say that it is the idea of a language more primitive than ours' (Wittgenstein, 1958, p. 3), including the famous example of a "primitive language"²²⁶ that involves a builder giving commands to his assistant to bring him the materials he needs to build (blocks, beams etc.). This is, presumably, to make the point that in his view it is only when one reduces language to its bare essentials that the meaning of a word can correspond with whatever it is supposed to represent i.e., when the builder calls out "block" his assistant brings him a block simply because they have agreed between them that that is what is to happen when he calls out that word. To anyone else in any other situation the shout "block" would be meaningless. No doubt the builder has trained his assistant to bring him a block when he calls for one but, as Wittgenstein writes in § 6; 'With different training the same ostensive teaching of these words would have effected a quite different understanding' (ibid., p. 5), so the assistant's training could easily have taught him to do something other than bring the builder a block. In § 7 Wittgenstein writes that:

We can ... think of the whole process of *using words* in [§ 2] as one of those games by means of which children learn their native language. I will call these games '*language-games*' ... And the processes of naming the stones and of repeating words after someone might also be called language-games. Think of much of the use of words in games like ring-ring-a-roses. I shall also call the

²²⁶ A key method used by Wittgenstein was to consider a primitive version of something he was investigating to get to the heart of the matter by removing all extraneous and unnecessary detail.

whole, *consisting of language and the actions into which it is woven*, the 'language-game'.
(*ibid.*, p. 5, my italics).

So the concept of language-game may be used on various different levels; it may be the process of teaching a language to someone or the use to which language is put in a children's game or the entire language in use including "the actions into which it is woven". In this section Wittgenstein can be seen stressing that a language-game is any use of words but not just the words being used themselves but the actions that the words are an integral part of; I think he is making the point that words only have meaning as part of actions and thus may have multiple meanings because they may be part of a range of different actions. In § 19 the point is made that 'It is easy to imagine a language consisting only of orders and reports in battle. Or a language consisting only of questions and expressions for answering yes and no. And innumerable others. And to imagine a language means to imagine a *form of life*' (*ibid.*, p. 8 my italics). Then in § 23 Wittgenstein states that:

But how many kinds of sentence are there? Say assertion, question, and command? There are *countless* kinds: countless different kinds of use of what we call 'symbols', 'words', 'sentences'. And this multiplicity is not something fixed, given once for all; but new types of language, new language-games, as we may say, come into existence, and others become obsolete and get forgotten.... Here the term '*language-game*' is meant to bring into prominence the fact that the *speaking* of language is part of an activity, or of a form of life. (*ibid.*, p. 11, author's italics).

Wittgenstein is stating, clearly in my view, that all words spoken are part of some language-game that comprises of the words themselves but also the activity to which they relate, and the activity and the language together are a form of life. The meaning given to a particular form of words is given to the words by the form of life of which they are an element or, in other words, as originally drawn to my attention by Davidson's writing, form of life is 'what

it is about a community that makes possible meaning' (Baker, 1984, p. 288) because 'forms of life rest finally on no more than the fact that we agree, find ourselves agreeing, in the ways that we size up and respond to what we encounter' (ibid., p. 278). Davidson draws attention to the fact that 'Sharing a "form of life" does not mean that everything is agreed about or shared, but that people tend to *understand* each other because of their *related* experiences' (Davidson, 2008, p. 794, author's italics). [Wittgenstein might have referred to "the family resemblances" of our experiences, NC] So, as Davidson writes, 'On this basis it might thus be argued that a place on the spectrum could constitute membership of an autistic "form of life", a shared background and cultural association among members who tend to respond to and communicate about situations in certain ways rather than others' (ibid., p. 794). Davidson quotes Dekker to reinforce her point about autistic people sharing a form of life since they understand each other because of their related experiences: 'autistic people often report that they have few problems communicating with and understanding people "of their own kind" ... communication problems arise when the cultural border is crossed' (Dekker, cited in Davidson, 2008, p. 797). The question must be, is Davidson right about the existence of an autistic form of life 'emerging ... particularly online (and based on) distinctive autistic styles of communication' (Davidson, 2008, p. 802)?

First of all, is Davidson correct that the differences seen in the communication of people with autism justify treating autistic communication as a "language-game" in its own right? I do not believe this is as simple a matter as Davidson appears to think it is. In theory I think an 'autistic' language-game is possible by which I mean that if 99 out of 100 people were autistic our language-game in the sense of the "whole"²²⁷ of our language and the actions of

²²⁷ This is a reference to Wittgenstein having said: 'I shall also call the *whole*, consisting of language and the actions into which it is woven, the "language-game"' (Wittgenstein, 1958, § 7, my italics).

which language is an element (Wittgenstein, 1958) would have been developed over the millennia by autistics and would reflect the autistic neurotype rather than the current PNT. But this is speculation; the question has to be whether a minority autistic language-game can develop alongside the majority language-game? At first sight it might appear that Wittgenstein's concept of a "private language" – that McGinn refers to as 'without doubt the most referred-to aspect of (his) later philosophy' (McGinn, 1997, p. 116) – could be relevant here but I do not believe this is so. McGinn explains 'private language' as follows:

He defines such a language, at *PI* 243, as one in which 'the individual words ... are to refer to what can only be known to the person speaking; to his immediate private sensations. So another person cannot understand the language.' The idea of a private language is introduced in explicit contrast to our ordinary psychological language, and the question Wittgenstein raises concerning it is whether we can *imagine* such a language. (ibid., p. 116/117, author's italics)

An autistic language-game, whether the predominant language-game in another world, or a minority language-game in this world, would be *public* so there is no need to give any further thought to such a language-game being a Wittgensteinian private language. Hence it is necessary to look elsewhere to see whether there could be an autistic language-game; that must require a detailed consideration of the nature of a language-game. McGinn states:

Wittgenstein introduces the concept of a language-game in order to bring into prominence the fact that language functions within the active, practical lives of speakers, that its use is inextricably bound up with the non-linguistic behaviour which constitutes its natural environment. (ibid., p. 43)

The links between a language-game, the "active, practical lives of speakers", and the "non-linguistic behaviour" associated with those active, practical lives makes the connection between a language-game and a "form of life". Of the linkage between language-game and

form of life, McGinn writes that ‘The idea of a form of life applies ... to historical groups of individuals who are bound together into a community by a shared set of complex, language-involving practices’ (ibid., p. 51) and that ‘Coming to share, or understand, the form of life of a group of individual human beings means mastering, or coming to understand, the intricate language-games that are essential to its characteristic practices’ (ibid., p. 51). This suggests to me that in the absence of autistics forming some kind of *group or community* they are engaging as best they can in the prevailing (PNT) language-game rather than engaging in their own language-game. And hence in a situation where they are not acting together in a community of their own – which would presumably include most interaction with PNTs – it seems one could not regard autism as a form of life in the Wittgensteinian sense. But the development of an online *group or community* of autistic people able to communicate with each other naturally (or, more likely, as naturally as possible given their ‘indoctrination’ into the PNT language-game) could, in my view, lead to a specific autistic language-game *centred in the online world* and hence to a specific autistic form of life centred on that world. But in situations where persons with autism have no choice but to communicate with others on the basis of the PNT language-game I think the issue for those with autism has to be the difficulties they face in communicating in a ‘foreign’ language-game; it does not appear to me that in such circumstances there is room for both a minority language-game and a majority language-game. Nevertheless, could a situation where communication between an autistic person and a so-called PNT person breaks down be an example of a clash between minority and majority language-games i.e., the cultural border crossing that Dekker referred to? In my opinion, the difficulties sometimes experienced when PNT and autistic people try to communicate is due to neither party being thoroughly grounded in the other’s mode of language (e.g. the PNT presumption that everyone understands body language, counterposed by the autistic difficulty in interpreting body language) which is, largely, about *both parties*

communicating at cross-purposes within the majority language-game rather than each party communicating in a separate language-game. Hence I agree with Davidson that ‘distinctive autistic styles of communication ... can be conceptualized in Wittgensteinian terms as ‘language-games’, and further, that they are associated with an autistic culture or ‘form of life’ that is emerging alongside their practice, particularly online’ (Davidson, 2008, pp. 791/792) *but only where autistic people have had sufficient time in which to develop as a true community such as is emerging online.*²²⁸ I am not saying I think this is just an online situation; the proviso is necessary to make my point that autistic communication only has the potential to be a family of language-games in its own right when a community of autistics has had time to develop ‘the practices and activities binding a community together that Wittgenstein intends to emphasize in the concept of a “form of life”’ (McGinn, 1997, p. 51).

In the light of the points made by Davidson, I believe that the features of autistic talk-in-interaction and autistic writing have the potential to constitute a ‘language-game’ associated with an autistic culture or ‘form of life’ *when autistic people are communicating with each other within a community of practices and activities.* But when members of the community of persons with autism are communicating with members of the PNT it will generally be the case that the autistic people either have to try and fall into line, as best they can, with PNT styles of communication or, if unable or unwilling to try to pass as PNT, may be perceived as ‘different’. This latter situation seems to me to be one where the predominant form of life

²²⁸ In proposing that an autistic language-game can only develop in a community situation I differ from Szatmari who considers that an autistic child’s own individual conversation (his example is a child – William – who speaks incessantly on the subject of underground (subway) trains, especially routes, window shape and seat colour) constitutes a private language-game. Szatmari says of his conversations with William that ‘I know we are playing a language game, only the rules are William’s own invention’ (Szatmari, 2004, p. 81), later writing that William would be better able to develop personal relationships ‘If the language game can become more public and less private’ (ibid., p. 95). How could one reconcile the existence of a private language-game with the impossibility of a private language? My interpretation of Wittgenstein is that he considers both language and language-games to be public phenomena *developed in interaction between people.* I do not think he would have regarded William’s constant wish to talk on his special interest as a language-game equivalent of solitaire but as the difficulty William had in understanding and applying the ‘rules’ of society’s language-games.

prevents true communication. This is not surprising given what Davidson says about the difference between neurotypical (NT) and AS speech:

As numerous authors attest, AS speech tends to be clear, to the point, and to avoid any reference to extraneous information that might muddy the clarity of communicative intent: 'NT conversations have a very fast-paced rhythm of little exchanges back and forth, whereas autistic people usually say what they have to say, in its entirety, then stop talking and wait for the other to respond' (Dekker 2006: n.p.) 'Language games' among autistics are precisely straightforward and a seriously rule-based affair. (Davidson, 2008, p. 796)

But I think there is, arguably, another equally important implication of Wittgenstein's thinking for autism; for gaining an understanding of what autism is. I quote again his comment that 'to imagine a language means to imagine a form of life' (Wittgenstein, 1958, p. 8). Jost writes that, according to Wittgenstein, 'the measure of a person's social and cognitive development is likely to be the degree to which she or he engages in the institutionalized language-games of the culture or, what is almost the same, the degree to which the person has acquired the customary concepts of society' (Jost, 1995, p. 15).

For Wittgenstein, the point is not only that we learn to internalize aspects of our culture, but that development *itself* is defined as progression through a complex series of culturally shared and socially supported language-games. The progression begins when one is born into a given cultural form of life (ibid., p. 15, author's italics)

Autistic people are born into a form of life (in its widest sense) determined by the PNT which results in an inability to fully internalise aspects of the prevailing culture – including the natural language of the culture – because they cannot progress through the language-games associated with the majority culture as easily as the majority PNTs can. The term "majority culture" could be replaced with "form of life", indeed, Hobson writes that: 'Whether or not an autistic child grasps particular kinds of linguistic and/or conceptual meaning will depend

upon the extent to which his “form of life” corresponds with that of the people from whom he learns to speak and think’ (Hobson, 1993, p. 181). Hobson followed this comment up with his hypothesis that many autistics have much greater potential – in a wider sense than just intellectual potential although that is a part of it – than appears to be the case.²²⁹

An alternative proposal [to the view that autistics have ‘splinter skills’, NC] is that many autistic children have far greater ‘potentialities’ than one observes, but that these cannot be fully realised because the children lack *experience* of intersubjective co-orientation and co-reference with others. The neurological ‘machinery’ for sophisticated cognitive function may be there, ready and waiting, but the cognitive materials with which the mind works – especially, what we reify and refer to as symbols – are never adequately forged in the crucible of interpersonal relations.

(*ibid.*, p. 181, author’s italics)

Wittgensteinian criteriological understanding of mind

Montgomery reminds us that the simulation theory and theory theory are not the only possible explanations for how children gain an understanding of other minds. He writes that ‘Curiously, Wittgenstein’s philosophy of mind has largely been absent from theoretical discussions of children’s thinking about the mind’ (Montgomery, 1997, p. 295) even though ‘Wittgenstein’s private language argument bears directly on many important issues regarding children’s thinking about the mind’ (*ibid.*, p. 292); it is a shame that this alternative perspective on the problem of other minds has been neglected although, perhaps, not altogether surprising given that Wittgenstein’s writings are seen by many as ‘difficult’ and are, unarguably, unconventional. Montgomery explains how the private language argument leads Wittgenstein to his ‘criteriological view’ of the understanding of other minds problem, and develops a synthesis of the criteriological and theory theory views.

²²⁹ At this point in his essay Hobson includes a lengthy quote from Bosch, the gist of which is that autistic people major in skills that do not require ‘intersubjective objectivization ... but can be objectivized by logical-mathematical laws’ (Bosch, in Hobson, 1993, p. 181). In other words, the potential may be more likely to be realised in subject areas (such as computing, engineering, mathematics, and science) that require the exercise of logic rather than in subjects that require the exercise of ‘missing’ intersubjective abilities.

Wittgenstein denies the possibility of a private language of mental states. Languages have rules but for Wittgenstein 'it is not possible to obey a rule privately: otherwise thinking one was obeying a rule would be the same thing as obeying it' (Wittgenstein, 1958, § 202). In other words, in the case of a private rule based on a sign in a private language how would one know whether one had obeyed the rule based on a true recollection of a mental state as opposed to misidentifying the mental state due to a failure of memory? The inability to introspectively differentiate between a correct recollection and an incorrect recollection means that 'experiences labeled *X* today may not be the same experiences labeled *X* yesterday' (ibid., p. 296). Montgomery points out that evidence from studies undertaken up to the time he was writing (1997) were compatible with the Wittgensteinian hypothesis in that (a) children's ability to introspect accurately had been shown to be unreliable, and (b) children seemed to be indifferent to the things they experienced (ibid.). I have been unable to identify any more recent evidence from my review of the relevant literature.

This indicates that a private language of mental state terms acquired via subjective introspection could not be shared with others as a child could not even be sure that the state they were currently in was the same as one they had experienced earlier, let alone be sure that the experience is the same one as that experienced by another person i.e., 'if there are no shared objective criteria then there is no basis upon which to be sure that two persons are talking about the same experience when using the same word' (ibid., p. 299) If a child's understanding of other minds is not based on a process of introspection (which would be required with a simulation theory in which the child has either to infer the same mental state as seen in another person) or by relating one mental state to another on the basis of a network of mental state terms (as would be necessary in the case of a theory theory explanation), Wittgenstein proposes that instead of a private language of mental state terms there would

have to be a set of public criteria²³⁰ as ‘public signs providing justification for imputing the mental state they signify’ (ibid., p. 299). This is the criteriological view of the development of an understanding in the child of other minds summarised by Montgomery as follows:

Wittgenstein’s argument (is) that the presence of criteria is necessary for teaching the meanings of various mental state terms to children and, also, for then gauging children’s correct use of these terms. Children use the criteria to conceptualize the mental state and to infer its presence or absence. (ibid., p. 305)

Beckermann writes of Wittgenstein’s criteriological view of other minds that what appears to be a symptom of a mental state (such as the behavior usually associated with pain) is actually a criterion, not a symptom; the key consideration apparently being that the mental state does not precede the behaviour, rather they are two sides of the same coin (and not behaviourism because Wittgenstein objects to the construal of mental state terms in physical state language, Beckermann thinking that Wittgenstein regarded these as two separate language-games)²³¹.

The predominant view in the 50s and 60s was a view that one could call the ‘criteriological account’. According to the proponents of this view Wittgenstein has shown by means of considerations on the meaning of linguistic expressions in general that there can be no mental states without behavioural criteria. *Pain behaviour* is not just a *symptom* of the mental state pain, but a *criterion*. That is to say, pain behaviour is corrigible evidence that somebody is in pain, but for semantic reasons it is, in a certain way, also sufficient evidence. (Beckermann, 2004, p. 2)

²³⁰ In Wittgensteinian’s criteriological view of understanding other minds a criterion may be defined as ‘something by which one may be justified in saying that the thing is so and by whose absence one may be justified in saying that the thing is not so’ (Albritton, 1959, p. 244).

²³¹ Although Wittgenstein explicitly rejected behaviourism, I think Beckermann is right that his pronouncements on the relationship between mental states and behaviour (if indeed ‘relationship’ is correct in this context) are ‘enigmatic’ (Beckermann, 2004, p. 3). The criteriological view of the mind is associated with Wittgenstein’s pattern account’ by which ‘the *patterns* of (a) person’s individual behaviour are in a certain way embedded in the *pattern* of the social behaviour of the community to which he belongs’ (von Savigny, in Beckermann, 2004, p. 7, author’s italics). Although, at first glance, the criteriological view and pattern account seemed, to me, to be as one with social interactionism and the language-game concept I found aspects of both troublesome. I have no space to discuss this here; suffice it to say that I do not believe they detract from the efficacy of the language-game concept in general or as a valuable element in an explanation of some of the difficulties seen in autism.

According to Montgomery, the criteriological view of the understanding of other minds by children does not entirely reject the theory theory approach but rather favours a synthesis of the two approaches whereby development of criteria precedes development of theory i.e., that criteria-based understanding may well be a precursor to theory-based understanding so that 'children's understanding of the mind is *eventually* theory-like' (Montgomery, 1997, p. 307, my italics). Montgomery also writes that there are instances where the criteriological view cannot adequately explain the child's ability to understand a mental state term and that such exceptions to the criteriological view require children to interrelate the various mental states in order to achieve an increasingly theoretical understanding of the mind. His view is that the involvement of children in language-games of the mind plays a crucial role in their development as they seek 'rule clarifications' (ibid., p. 308) in whichever language-game they happen to be acting in. And as the language-games become more complex with time the child adds new rules to account for new aspects of the games (ibid.). Whilst I cannot accept that a criteriological understanding of other minds precedes development of so-called ToM, and have difficulty with Montgomery's references to rules, his comments about the increasing ability of children to understand and act in language-games is valuable as it implies that children with autism may have a less well developed facility with language-games than their non-autistic peers. Is it possible that an autistic child (or even an autistic adult in some cases) may play a researcher's language-game at a less well developed level than a non-autistic child in a control group? It seems to me that failure in something like a false belief test, which most autism researchers would argue is evidence of a lack of a ToM (in the sense of the child lacking the *capacity* to understand other minds) may simply imply that the child is playing a less complex language-game than the adult researcher is expecting them to play on an age-related basis. Could it be that an autistic person's failure in a false belief test might not necessarily always imply a lack of capacity to understand false beliefs

but simply a *relative lack of experience of the language-game in play in comparison with children in control groups of typically developing and/or otherwise disabled children?*

CHAPTER XI

FINAL CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

As I do not have the luxury of access to transcribed autistic talk-in-interaction produced under naturalistic conditions I have had to resort to an analysis of autistic talk-in-interaction in the literature. Although conversation analysts provide transcriptions of the talk they have analysed to enable their readers to check their analysis work, there is only a very small corpus of these transcriptions and an even smaller body of transcriptions of the adult autistic talk-in-interaction that I am most interested in. Under the circumstances there is an, unfortunately, necessary element of conjecture with many of the findings but my objective in this regard has been to provide a 'starting block' for further research rather than a 'finishing line'.

Given the risk of error with retrospective diagnosis of autism one has to be cautious when drawing conclusions about autistic writing from the work of authors diagnosed retrospectively. Compounding the risk of unsound findings is the relative lack of prior research in autistic language methods which has necessitated what could be regarded as a overreliance on a relatively small number of studies (e.g., Brown and Quayson). It is, of course, too late to obtain diagnoses of the retrospectively diagnosed authors reviewed in this thesis, and neither can I produce results of research that has not taken place! Hence I have tried to be extremely careful with pronouncements derived from the research undertaken for this thesis. My primary aim has been to draw attention to the key conclusions drawn by the pioneers in this work as well as the areas of study regarded by them as being worthy of

further investigation. Having said this, I have read the books reviewed by the researchers I make reference to and have formed my own opinion as to the case for (a) each writer being on the autism spectrum, and (b) certain features of the writing of these authors taken as a whole being possible specific features of autistic writing. It does appear to me that there is a sufficiently strong case for most of the writers considered to have been autistic and for a number of the features of the writing of these authors to be either considered a specific feature of autistic writing or viewed as a very strong candidate for such consideration. As part of the review of apparent features of autistic talk-in-interaction and writing I have sought, where appropriate, to identify commonality between them.

Specific features of autistic talk-in-interaction and narrative writing

In conclusion, I have felt there to be sufficient data to enable me to make the following tentative suggestions regarding potential specific features of autistic talk-in-interaction and autistic narrative writing:

1. The nature and extent of their use of *formulaic language* may be a specific feature of the talk-in-interaction of autistics that reflects their autism.
2. I think it is reasonable to accept that *echolalia* – as reported on by many researchers over the years – is a specific feature of the talk-in-interaction of autistics that may reflect their autism. Whether echolalia is a feature of autism per se is another matter.
3. There is sufficient evidence in my view that *prefabricated writing* may be a specific feature of the writing of some autistics that may reflect their autism. Further research is needed to form a more definitive view.
4. The paucity of evidence means that it is not possible to form even a tentative view regarding *circularity* in the absence of a detailed analysis of autistic talk-in-interaction

undertaken in naturalistic settings. I am unaware of aspects of autistic writing that may 'match' circularity in autistic talk.

5. There is precious little evidence in support of a hypothesis that an *atypical understanding of socio-cultural indexicality* is a specific feature of the talk-in-interaction of autistics that may reflect their autism albeit it is intuitively the case that such a hypothesis 'fits the facts' of autism for those who have immersed themselves in the subject.
6. A single example produced in a case study of one child appearing to behave flexibly in conversation hardly counts as evidence that *inflexibility* is not a specific feature of the talk-in-interaction of autistics that may reflect their autism. Intuitively, given that inflexibility is an issue in autism more generally, it may be that the example in the study reviewed was a function of the particular circumstances of the study.
7. *Initiation of conversations for a specific purpose* is clearly a specific feature of the talk-in-interaction of autistics that may reflect their autism.
8. In view of the extensive literature regarding understanding of metaphor in autism, it is clear that atypical understanding of certain aspects of *figurative language* is a specific feature of the talk-in-interaction of autistics and narrative writing that may reflect their autism although one study of metonymy, fascinating though it is, is clearly insufficient to form a view about this particular aspect of figurative language use in autism.
9. Although many authors have drawn attention to the *prosodic differences* between autistic people and their PNT peers, it is only possible to conclude that prosodic differences seen in autism are specific features of the talk-in-interaction of autistics that *may* reflect their autism i.e., prosodic differences are specific features of autism but may be linguistic in nature, perhaps along the lines of the language disability suggested by Boucher (2003), rather than being due to the autism itself.
10. As I have found only one reference suggestive of a *focus on repairing prior turns* when

conversational rules would normally require a response to the conversational partner's turn, and a repair 'ignores' the partner's turn, being a specific feature of autistic talk-in-interaction that may reflect their autism, no conclusions can be drawn. However, because autistics are more likely to make conversational errors than the PNT it is also intuitively likely that they will have to engage in more conversational repair.

11. There is insufficient evidence that being *interpretable as poetry* is a specific feature of autistic talk-in-interaction.
12. If Maynard's (2005) typology is focused on conversational understandings rather than types of intelligence, and divided between the PNT and autism (rather than being considered a continuum), it is possible that a set of distinctly autistic *conversational understandings* may distinguish autistics from the PNT.
13. I conclude that there is a strong likelihood that *recipient design failure* (failure to consider audience) and *writer-based writing* are specific features of autistics' talk-in-interaction and writing respectively that may reflect their autism. The presence or otherwise of narrational gaps and discontinuities is observed in some examples of autistic writing but not in others. It is possible that particularly expert autistic writers with a reasonable grasp of ToM may be more prone to write for themselves than for an audience whilst able to avoid the incoherence and narrational gaps and discontinuities that appear in the writing of less expert autistic writers and/or those with a poorer grasp of ToM.
14. In my view the self looms sufficiently large in autistic writing for a case to be made that the *extent of the focus on the self* is often a specific feature of autistic writing reflecting the writer's autism (although, of course, PNT authors may also be self-preoccupied).
15. I think that the *idiosyncratic nature* of the writing of autistics may be a specific feature of much autistic writing reflecting their autism and that a combination of that idiosyncratic approach and writing talent may lead to unique and special writing.

16. It would appear that a *difficulty in sustaining narrative beyond short story* length may be a specific feature of much autistic writing that reflects the writer's autism and that the difficulty in sustaining narrative may affect the fluency of narrative written beyond short story length.
17. It does appear that a specific feature of much autistic narrative writing that reflects their autism is that, where characterisation is attempted by a writer the *characters are generally lacking in depth and superficial*.
18. I can see no justification for regarding *rich use of language* as specific to autistic writing and would rather argue that it is specific to much of the best writing by both autistic *and* PNT authors.
19. In view of the amount of apparent *systemising* in the writing of male autistics I conclude that an interest in systems is a specific feature of the writing of many *male* autistic writers that reflects their autism.

My work on this thesis has also led me to the following conclusions relating to the process of undertaking qualitative research on language methods in autism.

1. I am of the opinion that such research would benefit from an autistic researcher and PNT researcher working side-by-side (or that a team of researchers should include at least one autistic member²³² if there are sufficient autistic researchers to go round!).
2. As a 'generalist' doctoral researcher with no background in linguistics I have had to learn as much as I can about the subject of linguistics as quickly as I can to enable me to develop the necessary and sufficient understanding of the concepts involved. In my view, research in this area would benefit from the involvement of a linguistics specialist.

²³² It is very good to see an autistic researcher – Michelle Dawson – in Laurent Mottron's team at the University of Montréal. How many other teams of researchers in autism have an autistic member?

3. Lastly, as I believe the field of language methods in autism to be hugely important to gaining a better understanding of autism that should have many practical benefits for autistic people, it is my view that the field needs to be properly resourced and funded.

In the previous chapter I referred to Jost's point that 'In (Wittgenstein's) account, the measure of a person's social and cognitive development is likely to be the degree to which she or he engages in the institutionalized language-games of the culture or, what is almost the same, the degree to which the person has acquired the customary concepts of society' (Jost, 1995, p. 15), and 'For Wittgenstein, the point is not only that we learn to internalize aspects of our culture, but that development *itself* is defined as progression through a complex series of culturally shared and socially supported language-games. The progression begins when one is born into a given cultural form of life' (ibid., p. 15, author's italics). In my view the tentative synthesis of autism theory in chapter IX is consistent with Wittgenstein's views on the development of language and his language-game and form of life concepts.

Since writing the earlier content relating to Wittgenstein's ideas I have come across Stephen Timmons' article entitled *Wittgenstein's language-games as a theory of learning disabilities*. Using language that may make it look as if I got my ideas regarding language-games (in autism) from him, Timmons argues that: 'one of the ways in which we know that someone we encounter had a learning disability, in fact, possibly the way in which they are defined as having a learning disability, is due to their lack of skill in the execution of these games [language-games, NC]' (Timmons, 2006, p. 22). He concludes his paper by stating his view that 'one way of understanding how [persons with learning disabilities, NC] differ is not to focus on what someone can or cannot do, but instead to think about differing degrees of skill in the execution of a variety of quite distinct language-games. Thus any "disability" is a

socially constructed phenomenon, which can only be understood in its correct social context' (ibid., p. 22). Whilst he considers language-games in relation to intellectual learning disabilities, they are, arguably, in view of the social difficulties autistics face, even more relevant to autism in my opinion, as I have tried to make clear in this thesis. In his review of autistic narrative writing the philosopher Ian Hacking has written that:

The primary fact is that autists do not interact with others in the way that neurotypicals do, and so they never go through the Vygotskian process of internalizing social relationships to form concepts of the mental. Autistic people are also 'non-Köhlerian' in that they do not readily see, right off, what other people are doing. These two types of difference from neurotypicals are clearly interrelated.
(Hacking, 2009, p. 505)²³³

My argument is that because autistic people do not interact socially as do their PNT peers and do not "see what other people are doing" they cannot fully complete an "apprenticeship" in social matters leading to what can perhaps be best described as an inability to achieve typically developing fluency in society's language-games. The relative lack in comparison to PNT people of social interaction (the Vygotskian element of Hacking's thesis) and of an ability to read others (the Köhlerian element of Hacking's thesis) are, as he puts it, "clearly interrelated". Although I have no proof to back this up, I believe that the relative inability to read others is a natural consequence of the relative lack of social interaction (the less social interaction, the more difficult reading others will be), and that the relative inability to read others will compound the adverse effect of the relative lack of social interaction on the autistic person's fluency in society's language-games in comparison to PNTs by further reducing the amount of successful social interaction autistics engage in.

²³³ In this particular description of autism Hacking points out that he takes inspiration from (a) Vygotsky's view that a child's initially social speech develops into inner speech; and (b) Köhler's view that one person can tell another person's state of mind from their facial expressions and bodily movements. (Hacking, 2009)

What recommendations for further research can be made? Timmons considers, and I agree with him, that a language-game explanation of the difficulties associated with intellectual learning disabilities – that I believe can be applied equally, if not more strongly, to autism – ‘(suggests) a programme of research which could productively be undertaken’ (Timmons, 2006, p. 22). He does not expand on his suggestion but I think from what he says in his article it is clear he is proposing that investigations be undertaken in connection with the practice of learning to become proficient in the ‘skills, practices, and language games that we all take for granted, and may indeed have forgotten that we had to learn’ (ibid., p. 22)²³⁴ but which some people have difficulty learning. There are a number of references sprinkled throughout this thesis regarding the need for additional research in specific areas. I had intended to bring these recommendations together in a list in this final chapter, for ease of reference if for no other reason, but, on revisiting the recommendations, I see that many of them are a function of the topics that my review of the literature directed me to, and, although important in relation to those topics, are not necessarily the most important areas for research when the subject of autistic language methods is considered in the round. I shall not, therefore, list them all now lest this be construed as my attempt to set out the top priority areas for research in my field (which they may not be). Instead, I focus on what I consider to be ‘priority’ areas for further research. The following recommendations are made:

1. To develop a longitudinal understanding of the development of language methods in autism from the early years to adulthood, and the development of writing in autism (given that autism is a developmental matter).
2. To develop an understanding of how, and to what extent, the development of language methods in autism is linked with the social development of autistic people (given that autism is a social learning matter) including proficiency in language-games.

²³⁴ I think Timmons might have added that there are some language-games that we may not even be aware of having learned (or not learned as the case may be). The point is that in a typically developing situation the learning happens naturally but not *as naturally* in the case of autism for instance.

3. To develop an improved understanding of underlying autistic verbal language methods based on extensive field work in naturalistic conditions and CA.
4. To develop an improved understanding of autistic non-verbal behavior-in-interaction through deploying a *standard form of transcription for autistic non-verbal behaviour-in-interaction for deployment in naturalistic settings*.
5. To try and answer the fundamental question as to whether autistic talk-in-interaction relies on the same or different mechanisms to talk-in-interaction in the PNT.
6. To develop an understanding of autistic usage of online and other electronic communication media to enable such media to improve their services to autistic people (given the importance of the Internet and other electronic communication tools to the development of autistic communication, community, and culture).
7. To follow Segerdahl's advice to use CA in 'an educational program for people working with autistic persons' (Segerdahl, 1998, p. 315).
8. To respond to the research question: *'Are there specific features of the habitus of autistics that may reflect their autism?'*
9. To investigate the effects of autism on an individual's ability to engage successfully in language-games.

In my opinion, when undertaking language-related research in autism such as that suggested above there is a presumption that the involvement of a competent autistic researcher has the potential to improve the quality of the research output and outcomes²³⁵ given that (a) researchers can only hope to better understand autistic language methods by comparing them with PNT language methods, and (b) to be fully effective such comparative studies require

²³⁵ I wish to make it very clear that I am not for a moment suggesting a 'type' can only be researched by that 'type' i.e., that only autistic people can research autism. Such an argument would be subject to the absurdities of reductionism and the confusion of 'type' with reality. My position is that any 'type' can research any other 'type' but that in a situation where the subject matter of research – such as language methods – differ as between 'types' it would benefit the research to involve a representative of the 'type' being researched as researcher.

input from both autistic and PNT researchers. I therefore advocate that *autistic and PNT researchers should join together when investigating linguistic aspects of autism*. Also, research of this nature would benefit from the involvement of a specialist in linguistics and, since I believe that a better understanding of autistic language methods will lead to practical pedagogical benefits for autistic people (Segerdahl, 1998), should be adequately funded.

Beyond the ‘deficit-checklist’ approach to autism

Prizant has written that ‘The problem, which has apparently eluded the attention and concern of many researchers, is that a “deficit-checklist” orientation hasn’t taken us very far in understanding communicative behavior of autistic persons’ (Prizant, 1983, p. 296). Smukler and Ferguson write that ‘the way to transcend deficit models of autism is to formulate a new definition that is not determined so much by behaviour as by experience’ (Smukler and Ferguson, 2005, p. 21), referring to the need to listen to autistic people describing their own experiences of autism. In his PhD dissertation entitled *Unanticipated speech and autism* Smukler considers the strengths in autism as well as the weaknesses, setting out a “triad” of strengths produced by one of his autistic participants (Bobby) to complement the participant’s alternative triad of weaknesses.²³⁶ He writes that ‘Perhaps we could look at Bobby’s list as another “triad of impairments,” but it certainly does not map neatly onto those constructed by Wing’ (Smukler, 2006, p. 213). No doubt, Smukler is not proposing that Bobby’s approach is formally adopted as an alternative to the standard ‘triad’ but making the point that *autism is far more than a list of so-called ‘impairments’ in diagnostic criteria*.

(What is bad about having autism)

You cant stop making sounds. want tovery much bequeit.

Really hatrd to. awake. yes. autism is part ofwhatpeople think of me they think iam dstupid.

takes really along time togetmy homework done.

(What is good about having autism)

²³⁶ I have included Smukler’s comments on Bobby’s six features of his autism as Appendix F.

yes beig really smart andd really loving.
 people like mesomuch.
 being so understanding of what is important.
 (Bobby, cited in Smukler, 2006, pp. 212-213

Why did I not place an equal focus on autistic language *strengths* in this thesis? Of course, I had no choice but to concentrate mainly on weaknesses because psychological research is almost always focused on the need to develop, critique, and revise lists of diagnostic criteria (deficits). Given the difficulty of obtaining support in the absence of a diagnosis, this is all very necessary but, in ignoring the reverse side of the difference / disability coin – the strengths and abilities associated with autism – researchers are guilty of only seeing part of an autistic person’s ability profile (as indeed they would be in considering only the weaknesses in *any* individual). As a parting shot in this review of autistic language methods, and with a ‘health warning’ that it involves some speculation, I put forward in Table 11 below – as a basis for further research into autistic language methods – a first attempt at a typology of both the weaknesses *and strengths* of adult autistic talk-in-interaction and writing based on my work. Unfortunately, in a world often unfriendly to persons not of the PNT, many strengths are often not considered as such and as strengths are unlikely often to be universal in autism they are also unlikely to be afforded the same status as the weaknesses by clinicians. But, if one sees autism as a *difference* the strengths appear out of the fog surrounding disability.

Table 11: Provisional typology of adult autistic talk-in-interaction and autistic writing

Specific features of <i>some</i> autistic talk-in-interaction that <i>may</i> reflect autism	
Strengths	Weaknesses
Tend to say exactly what they mean	Echolalia
Tend not to talk just for the sake of talking	Difficulty maintaining a conversation
Tend to express themselves with clarity	Repetition and formulaicity
Deep understanding of areas of interest	Circularity
	Atypical socio-cultural indexicality understanding
Tendency to be consistent	Inflexible response strategies
Composite understandings	Constructive understandings

	Reversal of conversational preference orders
May be highly articulate	May have difficulty with idiomatic and figurative language
Originality of expression	Prosodic differences
	Greater focus on repairing prior talk
Specific features of <i>some</i> autistic writing that <i>may</i> reflect autism	
Strengths	Weaknesses
Brilliantly original ideas (e.g. Wittgenstein)	The ‘problem of audience’
Brilliantly original text (e.g. Beckett, Carroll)	Absence of sustained narratives
New genre (e.g. the hybrid novel as a series of short stories by Anderson)	Absence of fully-drawn characters
Poetic aspects (e.g. Carroll, Dickinson)	Excessive amounts of detail
Very thorough attention to detail (e.g. Thoreau, Whiteley)	Narrational gaps and discontinuities
Rich use of language including rich symbolism (e.g. Beckett, Carroll, Whiteley)	Preference for sameness (repetition)

Some concluding remarks and a final summary

McGrath raised a particularly important point – when writing about Michael Fitzgerald’s retrospective diagnosis of famous writers and other artists – that ‘(Fitzgerald’s) subjects all led productive, thus, on their terms, relatively fulfilling lives *without diagnosis*. Had these people been labeled, would the seeds of their genius have flourished as they did?’ (McGrath, 2007, p. 20). One cannot know what the effect of a diagnosis of autism on someone will be; it is distinctly possible that a diagnosis will alter a life trajectory but whether for the better or for the worse in any individual case cannot be known. I think all we can say for sure is that the greater the understanding of autism in society, the greater the likely acceptance of autism as part of human difference. A respect for difference must help to improve life chances. But, until then, and it may be a very long wait indeed for that better time, my opinion is that a diagnosis is only essential if legally obligatory ‘reasonable adjustments’ are required. An absence of a diagnosis and provision of reasonable adjustments clearly did not prevent Fitzgerald’s ‘patients’ from going down in history *but they were exceptional people*.

A social interactionist perspective on autism raises the question of whether such concepts as the zone of proximal development and the scaffolding of children in learning tasks can be applied to the *learning of social interaction itself and the language-games that form a major element of social interaction* or, put another way, can a concept that applies to the learning by a young child of a task that can be learned *in* a situation of social interaction (such as the ZPD and scaffolding) also apply to the teaching of that very social interaction itself? At this juncture ‘It remains to be seen whether such micro-skills can be taught’ (Hewitt, 1998, p. 90). I don’t know what the answer to this question is but am certain it is necessary to understand why autistic language methods develop in the way they do – and how the atypical process of language development in autism differs from typical language development – if we are ever to answer the question and maybe, even, develop interventions.

Smukler has made an important point regarding what he calls ‘communicative ambiguity’²³⁷ (Smukler, 2006, np) which, as I understand him, refers to the difficulties autistic people often experience in (mis)interpreting something that someone says. He writes that his study ‘suggests that this ambiguity is due more to widespread discomfort and intolerance for their differences than to features inherent to their disabilities, *and need not be inevitable*’ (ibid., np, my italics). Clearly, he considers that communication difficulties are more of a socially constructed phenomenon – in interaction with PNT people who either do not put the autistic

²³⁷ Smukler writes ‘Much of the communicative work I observed involved dealing with communicative ambiguity. The construct of a communicative continuum from silence to speech falsely suggests progress toward clearer and clearer communication as one moves toward speech. In fact, ambiguity was possible at *any* location on the communicative continuum. Meaning is always co-constructed and uncertainty regarding others’ meanings and intentions is inevitable. This ambiguity is exaggerated by the communicative differences inherent to autism. I noted ambiguity in silent interactions, interactions with unconventional talk (such as highly repetitive speech or self-talk), and interactions that appeared more conventional. People are labeled ‘autistic,’ in large part, based on differences in how they communicate and interact with others. These two areas are, of course, closely related. It is through communication and interaction that social roles become defined. Ambiguity in communication creates ambiguity in social interaction. Thus, communicative ambiguity, which is all but inevitable between autistic and non-autistic people, is invariably stigmatizing’ (Smukler, 2006, pp. 218-219, author’s italics). In this passage he states that communicative ambiguity is “all but inevitable” when persons with autism interact with their PNT peers whereas elsewhere he says it “need not be inevitable” (ibid., np). These statements are *not* contradictory because, in theory at least, people could be tolerant of autistic difference.

person at their ease or are actively intolerant of autistic difference – than they are natural features of autistic communication reflecting an individual’s autism; I am conscious that the specific features of autistic talk-in-interaction proposed in this thesis may be more of a contingent social construction than an inevitable feature of autistic communication.

In a final summary, having reviewed as much transcribed autistic conversation recorded in naturalistic settings as I could lay my hands on, as well as narrative writing by authors diagnosed or retrospectively diagnosed with autism, I sought to identify specific features of both talk and writing that appeared to reflect the person’s autism and then compared the findings of both reviews in an attempt to identify any commonality between the features of autistic talk and writing. I have concluded that there are specific features of talk and writing that reflect autism and that some of the features of autistic writing are a ‘mirror image’ of features of autistic talk; that there are *strengths* as well as *weaknesses* associated with autistic talk and writing i.e., that, when looking at autism from a linguistic stance, it is simply wrong to regard it as a disability; rather, it involves a different way of communicating – both verbally and in writing – than is the case with typically developing people. I conclude that various neglected theories have much to contribute to an understanding of what it means to be autistic and that atypical autistic social development leading to a failure to fully come to terms with society’s language-games lies at the heart of many difficulties in autism. Although it can only be a speculative conclusion at this juncture I suspect that the nature of the specific features of autistic talk-in-interaction identified tentatively in this thesis (see pages 276-278) are consistent with an autistic difficulty with language-games²³⁸.

²³⁸ This begs the question as to whether or not it might be possible to ‘train’ autistic people in language-games and thereby, perhaps, bring their habitus closer to that of their PNT peers. However, as I believe that an affinity with the complexities of language-games either comes naturally to a person *during the developmental process* (PNT) or does not (autism), my hypothesis is that, whilst some limited training may be feasible, it would inevitably result in an awkwardness in communication that could never be fully overcome.

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REFERENCES

Key: Items marked with an * have been the subject of a detailed review.

Aaron, P. G., Phillips, S. and Larsen, S. (1988). Specific reading disability in historically famous persons, *Journal of Learning Disabilities*, 21, 523-537

Abberley, P. (1987). The concept of oppression and the development of a social theory of disability, *Disability, Handicap and Society*, 2:1, 5-19

Adams, C. and Bishop, D. V. M. (1989). Conversational characteristics of children with semantic-pragmatic disorder, I: Exchange structure, turn-taking, repairs and cohesion, *British Journal of Disorders of Communication*, 24, 211-239

* Adams, C., Green, J., Gilchrist, A. and Cox, A. (2002). Conversational behavior of children with Asperger syndrome and conduct disorder, *Journal of Child Psychology and Psychiatry*, 43:5, 679-690

Adelman, K. A. and Adelman, H. S. (1987). Rodin, Patton, Edison, Wilson, Einstein: Were they really learning disabled?, *Journal of Learning Disabilities*, 20, 270-279

Ahern, K. J. (1999). Pearls, pith, and provocation: Ten tips for reflexive bracketing, *Qualitative Health Research*, 9:3, 407-411

Aitken, K. J. (2009). *A-Z of genetic factors in autism: A handbook for professionals*, London: Jessica Kingsley Publishers

Alasuutari, P., Bickman, L. and Brannen, J. (Eds.) (2008). *The Sage Handbook of Social Research Methods*, London: Sage

Albritton, R. (1968). On Wittgenstein's use of the term "criterion", In (Ed.) Pitcher, G. *Wittgenstein: The Philosophical Investigations*, Notre Dame: Notre Dame University Press

Amundson, R. (2009). Ian Hacking's critique of the theory-of-mind-deficit theory of autism, *What Sorts of People*. [online] Last accessed 27 September 2011: <http://whatsortsofpeople.wordpress.com/2009/01/27/ian-hackings-critique-of-the-theory-of-mind-deficit-theory-of-autism/>

Andersen, H. C. (1997). *The Complete Fairy Tales*, Ware: Wordsworth Editions

Anderson, S. (1997). *Winesburg, Ohio*, Oxford: Oxford University Press

- American Psychiatric Association. (1994). *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*, Washington, DC: American Psychiatric Association
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (4th ed., Text Revision)*, Washington, DC: American Psychiatric Association
- Asperger, H. (1938). Das psychisch abnormale kind, *Wiener Klinische Wochenschrift*, 51, 1314-1317
- Asperger, H. (1944). 'Autistic psychopathy' in childhood, in (Ed.) Frith, U., *Autism and Asperger Syndrome*, Cambridge: Cambridge University Press
- Atkinson, J. M. (1978). *Discovering Suicide: Studies in the Social Organization of Sudden Death*, London: Macmillan Press
- Atkinson, J. M. and Heritage, J. (1984). *Structures of Social Action: Studies in Conversation Analysis*, Cambridge: Cambridge University Press
- Attwood, T. (1998). *Asperger's Syndrome: A Guide for Parents and Professionals*, London: Jessica Kingsley Publishers
- Avery, D. (1999). Talking tragedy: Identity issues in the parental story of disability. In (Eds.) Corker, M. and French S. *Disability Discourse*, Buckingham: Open University Press
- Bagatell, N. (2007). Orchestrating voices: autism, identity and the power of discourse, *Disability & Society*, 22:4, 413-426
- Bagatell, N. (2010). From cure to community: transforming notions of autism, *Ethos*, 38:1, 33-55
- Baker, D. L. (2006). Neurodiversity, neurological disability and the public sector: notes on the autism spectrum, *Disability & Society*, 21:1, 15-29
- Baker, L. R. (1984). On the very idea of a form of life, *Inquiry*, 27, 277-289
- Baltaxe, C. A. M. (1977). Pragmatic deficits in the language of autistic adolescents, *Journal of Pediatric Psychology*, 2:4, 176-180
- Bara, B. G., Bosco, F. M. and Bucciarelli, M. (1999). Developmental pragmatics in normal and abnormal children, *Brain and Language*, 68, 507-528
- Barnes, J. L., Lombardo, M. V., Wheelwright, S., and Baron-Cohen, S. (2009). Moral dilemmas film task: A study of spontaneous narratives by individuals with autism spectrum conditions, *Autism Research*, 2, 148-156
- Baron, J. H. (1997). Illnesses and creativity: Byron's appetites, James Joyce's gut, and Melba's meals and mésalliances, *British Medical Journal*, 315, 1697-1703
- Baron, M. (2008). Autism – a creative process?: Poetry, poets, imagination, *Popular Narrative Media*, 1:1, 103-113

Baron-Cohen, S. (1991). Do people with autism understand what causes emotion?, *Child Development*, 62, 385-395

Baron-Cohen, S. (1995). *Mindblindness: An Essay on Autism and Theory of Mind*, Cambridge, Massachusetts: The MIT Press

Baron-Cohen, S. (2000). *Is Asperger's syndrome/high-functioning autism necessarily a disability?*, [online] Last accessed 7 February 2012 at: <http://www.larry-arnold.net/Neurodiversity/Mission/disability.htm>

Baron-Cohen, S. (2002). The extreme male brain theory of autism. *Trends in Cognitive Sciences*, 6:6, 248-254

Baron-Cohen, S. (2004). The cognitive neuroscience of autism, *Journal of Neurology, Neurosurgery and Psychiatry*, 75, 945-948

Baron-Cohen, S. (2008). Autism, hypersystemizing, and truth, *The Quarterly Journal of Experimental Psychology*, 61:1, 64-75

Baron-Cohen, S., cited in Hutto, D. D. (2008). *Folk Psychological Narratives: The Sociocultural Basis of Understanding Reasons*, Cambridge, Massachusetts: The MIT Press

Baron-Cohen, S., Ashwin, E., Ashwin, C., Tavassoli, T., and Chakrabarti, B. (2009). Talent in autism: hyper-systemizing, hyper-attention to detail and sensory hypersensitivity, *Philosophical Transactions of the Royal Society*, 364, 1377-1383

Baron-Cohen, S., Jolliffe, T., Mortimore, C. and Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or Asperger syndrome, *Journal of Child Psychology and Psychiatry*, 38:7, 813-822

Baron-Cohen, S., Leslie, A. M., and Frith, U. (1985). Does the autistic-child have a theory of mind, *Cognition*, 21:1, 37-46

Baron-Cohen, S., O'Riordan, M., Stone, V., Jones, R., Plaisted, K. (1999) Recognition of faux pas by normally developing children and children with Asperger syndrome or high-functioning autism. *Journal of Autism and Developmental Disorders*, 29, 407-18

Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y. and Plumb, I. (2001). The 'reading the mind in the eyes' test revised version: A study with normal adults, and adults with Asperger syndrome or high-functioning autism, *Journal of Child Psychology and Psychiatry*, 42:2, 241-251

Barnes, C. and Mercer, G. (1996). *Exploring the Divide: Illness and Disability*, Leeds: The Disability Press

Bashe, P. R. and Kirby, B. L. (2001). *The Oasis Guide to Asperger Syndrome*, New York: Crown Publishers

Beardon, L. (no date). *Is Autism a Disorder?*, [online] Last accessed 9 March 2012 at: <http://www.shu.ac.uk/faculties/ds/education/theautismcentre/papers.html>

Beardon, L. (2008). *Asperger syndrome and perceived offending conduct: a qualitative study*, Ph. D., Sheffield Hallam University

Beardon, L. (2012). *Personal communication*

Beardon, L., Martin, N. and Woolsey, I. (2009). What do students with Asperger syndrome or high functioning autism want at college and university? (in their own words), *Good Autism Practice*, 10:2, 35-43

Beck, K., (2003). *Opal: A Life of Enchantment, Mystery, and Madness*, London: Viking Penguin

Beck, U. (1996). World risk society as cosmopolitan society? Ecological questions in a framework of manufactured uncertainties, *Theory, Culture and Society*, 13:4, 1-32

Beckermann, A. (2004). *Wittgenstein, Wittgensteinianism and the contemporary philosophy of mind – continuities and changes*, [online] Last accessed 28 February 2012 at: [http://www.uni-bielefeld.de/\(de\)/philosophie/personen/beckermann/wittg_e3.pdf](http://www.uni-bielefeld.de/(de)/philosophie/personen/beckermann/wittg_e3.pdf)

Beckett, S. (1957). *Murphy*, New York: Grove Press

Beckett, S. (1958). *The Unnamable*, New York: Grove Press

Beckett, S. (1959). *Watt*, New York: Grove Press

Begona, V. (1996). On the semantics and pragmatics of metaphor: coming full circle, *Language and Literature*, 5:3, 195-208

Belkadi, A. (2006). Language impairments in autism: evidence against mind-blindness, *SOAS Working Papers in Linguistics*, 14, 3-13

Belmonte, M. K. (2008). Human, but More So: What the Autistic Brain Tells Us about the Process of Narrative, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge

Berger, J. (2008). Alterity and Autism: Mark Haddon's Curious Incident in the Neurological Spectrum, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge

Berger, P. and Luckmann, T. (1966). *The Social Construction of Reality*, London: Penguin Books

Bernhardt, D. (2005). *Echolalia*, New York: Four Way Books

Billig, M. (1999). Conversation analysis and the claims of naivety, *Discourse & Society*, 10, 572-576

Bishop, D. V. M. and Adams, C. (1989). Conversational characteristics of children with semantic-pragmatic disorder, II: What features lead to a judgement of inappropriacy?, *British Journal of Disorders of Communication*, 24, 241-263

Bishop, D. V. M., Chan, J., Hartley, J. and Weir, F. (1998). When a nod is as good as a word: Form-function relationships between questions and their responses, *Applied Psycholinguistics*, 19, 415-432

Bloom, P. and German, T. P. (2000). Two reasons to abandon the false belief task as a test of theory of mind, *Cognition*, 77, B25-B31

Blume, H. (1997). Autistics, freed from face-to-face encounters, are communicating in cyberspace. *The New York Times*. [online] Last accessed 29 May 2010: <http://query.nytimes.com/gst/fullpage.html?res=9803E7DC1F31F933A05755C0A961958260>

Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*, Berkeley, California: University of California Press

Blumer, H. (1980). Mead and Blumer: The convergent methodological perspectives of social behaviorism and symbolic interactionism, *American Sociological Review*, 45, 409-419

Bogdan, R and Taylor, S. (1987). Toward a sociology of acceptance: The other side of the study of deviance, *Social Policy*, 18:2, 34-39

Bogdashina, O. (2005). *Communication Issues in Autism and Asperger Syndrome: Do we speak the same language?*, London: Jessica Kingsley Publishers

Bolton, G. (2006). Narrative writing: reflective enquiry into professional practice, *Educational Action Research*, 14:2, 203-218

Booth, T. (2002). Inclusion and exclusion policy in England: who controls the agenda? In Armstrong, F., Armstrong, D. and Barton, L. (eds.). *Inclusive Education: Policy, Contexts and Comparative Perspectives*, London: David Fulton

Bosch, G. (1970). *Infantile Autism: A clinical and phenomenological-anthropological investigation taking language as the guide* (Jordan, D. and Jordan, I., Trans.), New York: Springer-Verlag

Boucher, J. (2003). Language development in autism, *International Journal of Pediatric Otorhinolaryngology*, 67S1, S159-S163

Boucher, J. (2012). Putting theory of mind in its place: psychological explanations of the socio-emotional-communicative impairments in autistic spectrum disorder, *Autism*, 16:3, 226-246

Boundas, C. V. (2007). How to recognize Analytic Philosophy, In (Ed.) Boundas, C. V. *The Edinburgh Companion to Twentieth-Century Philosophies*, Edinburgh: Edinburgh University Press

Bourdieu, P. (1990). *The Logic of Practice*, Stanford: Stanford University Press

Boutot, E. A. (2007). Fitting in: tips for promoting acceptance and friendships for students with autism spectrum disorders in inclusive classrooms, *Intervention in School and Clinic*, 42:3, 156-161

Bowler, D. (2007). *Autism Spectrum Disorders: Psychological Theory and Research*, Chichester: John Wiley & Sons

Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M. and Richardson, V. (2005). Qualitative studies in special education, *Exceptional Children*, 71:2, 195-207

Brock, J., Norbury, C., Einav, S. and Nation, K. (2008). Do individuals with autism process words in context? Evidence from language-mediated eye-movements, *Cognition*, 108:3, 896-904

Brod, M. (1937/1995). *Franz Kafka: A Biography*, New York: Da Capo Press

Broderick, A. A. (2008). Autism as metaphor: narrative and counter-narrative, *International Journal of Inclusive Education*, 12:5-6, 459-476

Brown, J. (2010). *Writers on the Spectrum: How Autism and Asperger Syndrome have Influenced Literary Writing*, London: Jessica Kingsley Publishers

Bruner, J. (1977). *The Process of Education*, Cambridge, MA: Harvard University Press

Bruner, J. (1986). *Actual Minds, Possible Worlds*, Cambridge, MA: Harvard University Press

Bruner, J. (1996). *The Culture of Education*, Cambridge, MA: Harvard University Press

Bruner, J. and Feldman, C. (1993). Theories of Mind and the Problem of Autism, In (Eds.) Baron-Cohen, S., Tager-Flusberg, H. and Cohen, D. J. *Understanding Other Minds: Perspectives from Autism*, Oxford: Oxford University Press

Bryson, S. E., Clark, B. S., and Smith, I. M. (1988). First report of a Canadian epidemiological study of autistic syndromes, *Journal of Child Psychology and Psychiatry*, 29, 433-445

Burge, T. (2007). Philosophy of Language: 1950-2000, In (Ed.) Boundas, C. V. *The Edinburgh Companion to Twentieth-Century Philosophies*, Edinburgh: Edinburgh University Press

Burks-Abbott, G. (2008). Mark Haddon's Popularity and Other Curious Incidents in My Life as an Autistic, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge

Bury, M. in (Eds.) Barnes, C. and Mercer, G. (1996). *Exploring the Divide: Illness and Disability*, Leeds: The Disability Press

Buttny, R. (1993). *Social Accountability in Communication*, London: Sage

Caelli, K., Ray, L. and Mill, J. (2003) 'Clear as mud': Toward greater clarity in generic qualitative research, *International Journal of Qualitative Methods*, 2:2, 1-13

Campbell, C. and Deacon, H. (2006). Unraveling the contexts of stigma: From internalization to resistance to change, *Journal of Community and Applied Social Psychology*, 16, 411-417

Canfield, J. V. (1993). The living language: Wittgenstein and the empirical study of communication, *Language Sciences*, 15:3, 165-193

Capps, L., Kasari, C., Yirmiya, N. and Sigman, M. (1993). Parental perception of emotional expressiveness in children with autism, *Journal of Consulting and Clinical Psychology*, 61:3, 475-484

Carpendale, J. I. and Chandler, M. J. (1996). On the distinction between false belief understanding and subscribing to an interpretative theory of mind, *Child Development*, 67:4, 1686-1706

Carpendale, J. I. M. and Lewis, C. (2004). Constructing and understanding of mind: The developments of children's social understanding within social interaction, *Behavioral and Brain Sciences*, 27, 79-96

Carpendale, J. I. M. and Racine, T. P. (2011). Intersubjectivity and egocentrism: Insights from the relational perspectives of Piaget, Mead, and Wittgenstein, *New Ideas in Psychology*, 29, 346-354

Carr, W. in (Eds.) Bridges, D., and Smith, R. (2007). *Philosophy, Methodology and Educational Research*, Oxford: Blackwell Publishing

Carrington, S. and Graham, L. (2001). Perceptions of school by two teenage boys with Asperger syndrome and their mothers: a qualitative study, *Autism*, 5:1, 37-48

Carroll, L. (1971). *Alice's Adventures in Wonderland*, Oxford: Oxford University Press

Chamak, B., Bonniau, B., Jaunay, E. and Cohen, D. (2008). What can we learn about autism from autistic persons? *Psychotherapy and Psychosomatics*, 77, 271-279

Charon, J.M. (2004). *Symbolic Interactionism: An Introduction, An Interpretation, An Integration*, Upper Saddle River, NJ: Pearson Prentice Hall

Charmaz, K. (2005). Grounded theory in the 21st century in Denzin, N.K. and Lincoln, Y.S. (eds.) *The Sage Handbook of Qualitative Research*, London: Sage

Chevallier, C., Wilson, D., Happé, F. and Noveck, I. (2010). Scalar inferences in autism spectrum disorders, *Journal of Autism and Developmental Disorders*, 40, 1104-1117

Chew, K. (2005). *Fractioned idiom: poetry and the language of autism*, [online] Last accessed 9 February 2012 at: http://www.cwru.edu/affil/sce/Texts_2005/Autism%20and%20Representation%20Chew.htm

Chew, K. (2008). Fractioned Idiom: Metonymy and the Language of Autism, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge

Chew, K. (2012). *Personal communication*

Chomsky, N. (2006). *Language and Mind*, Cambridge: Cambridge University Press

Clark, H. H. and Schaefer, E. F. (1989). Contributing to discourse, *Cognitive Science*, 13, 259-294

Colle, L., Baron-Cohen, S., and Hill, J. (2007a). Do Children with Autism Have a Theory of Mind? A Non-verbal Test of Autism vs. Specific Language Impairment. *Journal of Autism and Developmental Disorders*, 37:4, 716-723

Colle, L., Baron-Cohen, S., Wheelwright, van der Lely, H. (2007b) Narrative Discourse in adults with high-functioning autism or Asperger syndrome. *Journal of Autism and Developmental Disorders*, 38:1, 28-40

Colombino, T. (2006). Problems with a relevance-theoretic account of autism, *Theory & Psychology*, 16:2, 169-177

Corker, M. and French, S. (Eds) (1999). *Disability Discourse*, Buckingham: Open University Press

Cornwell, E. F. (1973). Samuel Beckett: The flight from self, *PMLA*, 88:1, 41-51

Cortazzi, M. (1994). Narrative analysis, *Language Teaching*, 27:3, 157-170

Coulter, J. (1999). Discourse and mind, *Human Studies*, 22, 163-181

Craig, R. T. (2007). Pragmatism in the field of communication theory, *Communication Theory*, 17:2, 125-145

Craig, J. and Baron-Cohen, S. (1999). Creativity in autism and Asperger syndrome, *Journal of Autism and Developmental Disorders*, 29:4, 319-326

Cruz, F. M. D. (2010). Verbal repetitions and echolalia in Alzheimer's discourse, *Clinical Linguistics & Phonetics*, 24:11, 848-858

Crystal, D. (1987). *Clinical Linguistics*, London: Edward Arnold

Crystal, D. (1992). *Profiling Linguistic Disability*, London: Whurr

Culler, J. (1985). Communicative competence and normative force, *New German Critique*, 35, 133-144

* Damico, J. S. and Nelson, R. L. (2005). Interpreting problematic behavior: Systematic compensatory adaptations as emergent phenomena in autism, *Clinical Linguistics & Phonetics*, 19:5, 405-417

Davidson, J. (2007). 'In a world of her own...': Re-presenting alienation and emotion in the lives and writings of women with autism, *Gender, Place & Culture*, 14:6, 659-677

Davidson, J. (2008). Autistic culture online: virtual communication and cultural expression on the spectrum, *Social & Cultural Geography*, 9:7, 791-806

de Villiers, J., Stainton, R. J. and Szatmari, P. (2007). Pragmatic abilities in autism spectrum disorder: A case study in philosophy and the empirical, *Midwest Studies in Philosophy*, 31, 292-317

* de Villiers, J., Fine, J., Ginsberg, G., Vaccarella, L. and Szatmari, P. (2007). Brief report: A scale for rating conversational impairment in autism spectrum disorder, *Journal of Autism and Developmental Disorders*, 37, 1375-1380

Deisinger, J. A. (2011). History of Autism Spectrum Disorders, In (Eds.) Rotatori, A. F., Obiakor, F. E. and Bakken, J. P. *History of Special Education (Advances in Special Education, Volume 21)*, Bingley: Emerald Group Publishing

Dekker, M. (2006). On our own terms: emerging autistic culture, [online]. Last accessed 12 December 2011 at: <http://autisticculture.com/index.php?page¼articles>.

Delanty, G. (1997). *Social Science: Beyond Constructivism and Realism*, Buckingham: Open University Press

Delanty, G. (2005). *Social Science: Philosophical and Methodological Foundations*, Maidenhead: Open University Press

Deleuze, G. and Guattari, F. (1986). *Kafka: Toward a Minor Literature*, trans. Polan, D. Minneapolis, MN: University of Minnesota Press

* Delves, K. and Stirling, L. (2009). *Studying misunderstanding and repair in adult-child interactions: Lessons from conversations with typically developing children and high functioning children with autism*, Proceedings of the Conference of the Australian Linguistic Society held at the La Trobe University, Melbourne

Denzin, N. K. (1992). *Symbolic Interactionism and Cultural Studies: The Politics of Interpretation*, Oxford: Blackwell

Despert, J. L. (1946). Irrelevant and metaphorical language in early infantile autism: Discussion, *The American Journal of Psychiatry*, 103, 245-246

Dewsbury, G., Clarke, C., Randall, D., Rouncefield, M., and Sommerville, I. (2004). The anti-social model of disability, *Disability & Society*, 19:2, 145-158

Dey, I. (2004). Grounded Theory, In (Eds.) Seale, S., Gobo, G., Gubrium, J. F. and Silverman, D. *Qualitative Research Practice*, London: Sage Publications

Dickerson, P., Rae, J., Stribling, P., Dautenhahn, K. and Werry, I. (2005). Autistic children's co-ordination of gaze and talk: Re-examining the asocial autist, In (Eds.) Richards, K. and Seedhouse, P. *Applying Conversation Analysis*, New York: Palgrave Macmillan

- Dickinson, E. (1969). (Ed.) Franklin, R. W. *The Poems of Emily Dickinson*, Cambridge, Massachusetts: Harvard University Press
- Diehl, J. J., Bennetto, L., and Young, E. C. (2006). Story recall and narrative coherence of high-functioning children with autism spectrum disorders, *Journal of Abnormal Child Psychology*, 34:1, 83-98
- Diehl, J. J., Bennetto, L., Watson, D., Gunlogson, C. and McDonough, J. (2008). Resolving ambiguity: A psycholinguistic approach to understanding prosody processing in high-functioning autism, *Brain & Language*, 106, 144-152
- * Dobbinson, S, Perkins, M. R. and Boucher, J. (1998), Structural patterns in conversations with a woman who has autism, *Journal of Communication Disorders*, 31:2, 113-134
- * Dobbinson, S, Perkins, M. and Boucher, J. (2003), The interactional significance of formulas in autistic language, *Clinical Linguistics & Phonetics*, 17, 299-307
- Dowling, M. (2007). Ethnomethodology: Time for a revisit? A discussion paper, *International Journal of Nursing Studies*, 44, 826-833
- Drew, E. and Haahr, M. (2002). *Lessness: randomness, consciousness and meaning*, Proceedings of the 4th International CAiiA-STAR Research Conference 'Consciousness Reframed' in Perth, Australia
- Ehlers, S. and Gillberg, C. (1993). The epidemiology of Asperger syndrome: A total population study, *The Journal of Child Psychology and Psychiatry*, 34:8, 1327-1350
- Eigsti, I-M., Bennetto, L. and Dadlani, M. B. (2007). Beyond pragmatics: Morphosyntactic development in autism, *Journal of Autism and Developmental Disorders*, 37, 1007-1023
- Eigsti, I-M., de Marchena, A B., Schuh, J. M. and Kelley, E. (2011). Language acquisition in autism spectrum disorders: A developmental review, *Research in Autism Spectrum Disorders*, 5, 681-691
- Emirbayer, M. and Maynard, D. W. (2011). Pragmatism and ethnomethodology, *Qualitative Sociology*, 34, 221-261
- Esposito, L. and Murphy, J. W. (1999). Desensitizing Herbert Blumer's work on race relations: Recent applications of his group position theory to the study of contemporary race prejudice, *The Sociological Quarterly*, 40:3, 397-410
- Estes, A., Rivera, V., Bryan, M., Cali, P., and Dawson, G. (2010). Discrepancies between academic achievement and intellectual ability in higher-functioning school-aged children with autism spectrum disorder, *Journal of Autism and Developmental Disorders*, 41:8, 1044-1052
- Eysenck, M. W. (1984). *A Handbook of Cognitive Psychology*, London: Lawrence Erlbaum
- Falk, G. (2001). *Stigma: How We Treat Outsiders*, New York, USA: Prometheus Books

Feinstein, A. (2012). *Personal communication*

Fine, G. A. (1993). The sad demise, mysterious disappearance and glorious triumph of symbolic interactionism, *Annual Review of Sociology*, 19, 61-87

Fine, J., Bartolucci, G., Szatmari, P. and Ginsberg, G. (1994). Cohesive discourse in pervasive developmental disorders, *Journal of Autism and Developmental Disorders*, 24, 315-329

Fisher, N., and Happé, F. (2005). A training study of theory of mind and executive function in children with autistic spectrum disorders. *Journal of Autism and Developmental Disorders*, 35, 757-771

Fitzgerald, M. (2000a). Did Ludwig Wittgenstein have Asperger's syndrome, *European Child & Adolescent Psychiatry*, 9, 61-65

Fitzgerald, M. (2000b). Ludwig Wittgenstein: autism and philosophy, *Journal of Autism and Developmental Disorders*, 30:6, 621/622

Fitzgerald, M. (2004). *Autism and Creativity: Is There a Link Between Autism in Men and Exceptional Ability?* London: Brunner-Routledge

Fitzgerald, M. (2008). Autism: Asperger's syndrome – history and first descriptions, In (Eds.) Rausch, J. L., Johnson, M. E. and Casanova, M. F. *Asperger's Disorder*, New York: Informa Healthcare

Fitzgerald, M. (2008). *Creativity, psychosis, autism and the social brain*, [online] Last accessed 25 November 2011 at: http://www.intechopen.com/source/pdfs/20041/InTech-Creativity_psychosis_autism_and_the_social_brain.pdf

Fleming, D. (undated). Pierre Bourdieu: Habitus, [online] Last accessed 2 December 2011 at: <http://ist-socrates.berkeley.edu/~fl3min4/130/bourdieu.html>

Fletcher, J. (1965). Samuel Beckett and the philosophers, *Comparative Literature*, 17:1, 43-56

Flick, U., von Kardorff, E. and Steinke, I. (Eds.) (2004). *A Companion to Qualitative Research*, London: SAGE

Floersch, J., Longhofer, J.L., Kranke, D., and Townsend, L. (2010). Integrating thematic, grounded theory and narrative analysis: A case study of adolescent psychotropic treatment, *Qualitative Social Work*, 9:3, 407-425

Flower, L. (1979). Writer-based prose: A cognitive basis for problems in writing, *College English*, 41:1, 19-37

Forrester, M. (2010). Ethnomethodology and adult-child conversation: Whose development?, in (Eds.) Gardner, H. and Forrester, M., *Analysing Interactions in Childhood: Insights from Conversation Analysis*, Chichester: John Wiley & Sons

- Franzosi, R. (1998). Narrative analysis-or why (and how) sociologists should be interested in narrative, *Annual Review of Sociology*, 24, 517-554
- Friedman, M. J. (1960). The novels of Samuel Beckett: An amalgam of Joyce and Proust, *Comparative Literature*, 12:1, 47-58
- Frith, U. (Ed.) (1991). *Autism and Asperger Syndrome*, Cambridge: Cambridge University Press
- Frith, U. and Happé, F. (1999). Theory of mind and self-consciousness: What is it like to be autistic? *Mind and Language*, 14, 1-22
- Frith, U., Happé, F., and Siddons, F. (1994). Autism and theory of mind in everyday life. *Social Development*, 3, 108-124
- Frith, U. and de Vignemont, F. (2004). Egocentrism, allocentrism, and Asperger syndrome, *Consciousness and Cognition*, 14, 719-738
- * Gainer Sirota, K. (2004) Positive politeness as discourse process: politeness practices of high-functioning children with autism and Asperger syndrome, *Discourse Studies*, 6:2, 229-251
- * Gainer Sirota, K. (2010). Narratives of distinction: Personal life narrative as a technology of the self in the everyday lives and relational worlds of children with autism, *Ethos*, 38:1, 93-115
- Gallagher, S. (2008). Inference or interaction: social cognition without precursors, *Philosophical Explorations*, 11:3, 163-174
- Garfinkel, H. (1963). A conception of, and experiments with, 'trust' as a condition of stable concerted actions. In (Ed.) Harvey, O. J., *Motivation and Social Interaction*, New York: Ronald Press
- Garfinkel, H. (1967). *Studies in Ethnomethodology*, Englewood Cliffs, NJ: Prentice-Hall
- Garland, P. (2008). Action Theory in Habermas and Educational Practices, in (Eds.) Hudson, B. and Zgaga, P. *Teacher Education Policy in Europe: A Voice of Higher Education Institutions*, [online] Last accessed 6 February 2012 at: http://ceps.pef.uni-lj.si/knjiznica/doc/teacher_education_policy.pdf#page=209
- Garland, P. (2012). *Personal communication*
- Gearing, R.E. (2004). Bracketing in research: A typology, *Qualitative Health Research*, 14, 1429-1452
- Geils, C. (2003). *In conversation with Barney: A critical discourse analysis of interaction between a child with autism and his co-participants*, [online] Last accessed 23 December 2011 at: <http://eprints.ru.ac.za/62/1/Geils-MA.pdf>

- * Geils, C. and Knoetze, J. (2008). Conversations with Barney: A conversation analysis of interactions with a child with autism, *South African Journal of Psychology*, 38:1, 200-224
- Gergen, K. J. (2011). The self as social construction, *Psychological Studies*, 56:1, 108-116
- Gerland, G. (1996). *A Real Person: Life on the outside*, London: Souvenir Press
- Gibbs, G. (2007). *Analyzing Qualitative Data*, London: Sage
- Gillberg, C. (1991). Clinical and neurobiological aspects in six family studies of Asperger's syndrome, In (Ed.) Frith, U., *Autism and Asperger's Syndrome*, Cambridge: Cambridge University Press
- Gillberg, C. and Coleman, M. (1992). Prevalence of autism and autistic-like conditions. In: *The Biology of the Autistic Syndromes*, London: MacKeith Press
- Gillberg, C., Steffenburg, S., and Schaumann, H. (1991). Is autism more common now than 10 years ago?, *British Journal of Psychiatry*, 158, 403-409
- Glaser, B.G. and Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*, AldineTransaction: Piscataway, New Jersey
- Glastonbury, M. (1997a). The Cultural Presence of Autistic Lives, *Raritan*, 17:1, 24-44
- Glastonbury, M. (1997b). 'I'll teach you differences': on the cultural presence of autistic lives, *Changing English*, 4:1, 51-65
- Gluer, K. and Pagin, P. (2003). Meaning theory and autistic speakers, *Mind & Language*, 18:1, 23-51
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*, New York: Anchor Books
- Goffman, E. (1963). *Stigma: Notes on the Management of Spoiled Identity*, Englewood Cliffs, NJ: Prentice-Hall
- Goldenfeld, N., Baron-Cohen, S., and Wheelwright, S. (2005). Empathizing and systemizing in males, females, and autism, *Clinical Neuropsychiatry*, 2:6, 1-8
- Goldknopf, E. (2002). A life in linguistics and communication disorders: An interview with Christiane Baltaxe, *Issues in Applied Linguistics*, 13:2, 187-201
- Goodley, D. (2011). *Disability Studies: An Interdisciplinary Introduction*, London: Sage Publications
- Goodwin, C. and Heritage, J. (1990) Conversation analysis, *Annual Review of Anthropology*, 19, 283-307
- Gordon, R. M. (2008). Beyond mindreading, *Philosophical Explorations*, 11:3, 219-222

- Grandin, T. (2000). *My Experiences with Visual Thinking Sensory Problems and Communication Difficulties*, [online] Last accessed 2 October 2011 at: http://www.autism.com/ind_temple_experiences.asp
- Grandin, T. (2001). Genius may be an Abnormality: Educating Students with Asperger's Syndrome, or High Functioning Autism, [online] Last accessed 2 October 2011 at: http://www.autismtoday.com/articles/Genius_May_Be_Abnormality.htm
- Grandin, T. (2006). *Thinking In Pictures: And Other Reports From My Life With Autism*, London: Doubleday
- Gray, D.E. (2002). 'Everybody just freezes. Everybody is just embarrassed': felt and enacted stigma among parents of children with high functioning autism, *Sociology of Health & Illness*, 24:6, 734-749
- Gray, R. T., Gross, R. V., Goebel, R. J. and Koelb, C. (2005). *A Franz Kafka Encyclopedia*, Westport, CT: Greenwood Press
- Gray, K., Jenkins, A. C., Heberlein, A. S. and Wegner, D. M. (2011). Distortions of mind perception in psychopathology, *Proceedings of the National Academy of Sciences of the United States of America*, 108:2, 477-479
- Green, S.E. (2003). "What do you mean 'what's wrong with her?'": stigma and the lives of families of children with disabilities, *Social Science & Medicine*, 57, 1361-1374
- Griswold, A. (2007). *The world as Wittgenstein found it: The Tractatus Logico-Philosophicus as a model of autistic cognition*, [online] Last accessed 29 September 2011 at: <http://autisticsymphony.com/wittgenstein.html>
- Grossman, R. B., Bemis, R. H., Skwerer, D. P. and Tager-Flusberg, H. (2010). Lexical and affective prosody in children with high-functioning autism, *Journal of Speech, Language and Hearing Research*, 53, 778-793
- Gulson, K. N. and Parkes, R. J. (2010). Bringing theory to doctoral research, in (Eds.) Thomson, P. and Walker, M. *The Routledge Doctoral Student's Companion: Getting to grips with research in Education and the Social Sciences*, London: Routledge
- Habermas, J. (1984). *Theory of Communicative Action*, Vol. 1: *Reason and the Rationalization of Society* (T.McCarthy, Trans.), London: Heinemann
- Habermas, J. (1987). *Theory of Communicative Action*, Vol. 2: *Lifeworld and System: A Critique of Functionalist Reason* (T.McCarthy, Trans.), London: Heinemann
- Habermas, J. (2001). *On the Pragmatics of Social Interaction: Preliminary Studies in the Theory of Communicative Action*, Cambridge, MA: MIT Press
- Hacking, I. (2009a). Autistic autobiography, *Philosophical Transactions of the Royal Society*, 364, 1467-1473

- Hacking, I. (2009b). How we have been learning to talk about autism: A role for stories, *Metaphilosophy*, 40, 499-516
- Hadden, S. C., and Lester, M. (1994). Grounded Theory Methodology as a Resource for Doing Ethnomethodology, in (Ed.) Glaser, B. G., *More Grounded Theory Methodology: A Reader*, Mill Valley, CA: Sociology Press.
- Hammersley, M. (2003). Conversation analysis and discourse analysis: methods or paradigms?, *Discourse & Society*, 14:6, 751-781
- Happé, F. (1993). Communicative competence and theory of mind in autism: A test of relevance theory, *Cognition*, 48, 101-119
- Happé, F. (1994). *Autism: an introduction to psychological theory*. Hove and New York: Psychology Press
- Happé, F. (1995). Understanding minds and metaphors: Insights from the study of figurative language in autism, *Metaphor and Symbol*, 10:4, 275-295
- Happé, F. and Frith, U. (2006). The weak coherence account: detail-focused cognitive style in autism spectrum disorders. *Journal of Autism & Developmental Disorders*, 36:1, 5-25
- Happé, F. and Ronald, A. (2008). The 'fractionable autism triad': A review of evidence from behavioural, genetic, cognitive and neural research, *Neuropsychological Review*, 18, 287-304
- Happé, F. and Frith, U. (2009). The beautiful otherness of the autistic mind, *Philosophical Transactions of The Royal Society*, 364, 1345-1350
- Happé, F. and Vital, P. (2009). What aspects of autism predispose to talent?, *Philosophical Transactions of The Royal Society*, 364, 1369-1375
- Harré, R. (1992). The discursive creation of human psychology, *Symbolic Interaction*, 15, 515-527
- Hart, D., Grigal, M., and Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities, *Focus on Autism and Other Developmental Disabilities*, 25:3, 134-150
- Hartley, S. L. and Sikora, D. M. (2010). Detecting autism spectrum disorder in children with intellectual disability: Which DSM-IV-TR criteria are most useful?, *Focus on Autism and Other Developmental Disabilities*, 25:2, 85-97
- Hayashi, M. et al., (2008). Superior fluid intelligence in children with Asperger's disorder, *Brain and Cognition*, 66:3, 306-310
- Heider, F. and Simmel, M. (1944). An experimental study of apparent behaviour, *The American Journal of Psychology*, 57, 243-259
- Heilbrun, C.G. (1988). *Writing a Woman's Life*, New York: Norton

- Heritage, J. (1984). *Garfinkel and Ethnomethodology*, Cambridge, UK: Polity Press
- Hermelin, B. (2001). *Bright Splinters of the Mind: A Personal Story of Research with Autistic Savants*, London: Jessica Kingsley Publishers
- Herschbach, M. (2008). Folk psychological and phenomenological accounts of social perception, *Philosophical Explorations*, 11:3, 223-235
- Hetherington, S.A., Durant-Jones, L., Johnson, K., Nolan, K., Smith, E., Taylor-Brown, S., and Tuttle, J. (2010). The lived experiences of adolescents with disabilities and their parents in transition planning, *Focus on Autism and Other Developmental Disabilities*, 25:3, 163-172
- Hewitt, L. E. (1998). Introduction: A social interactionist view of autism and its clinical management, *Journal of Communication Disorders*, 31, 87-92
- Hill, E. L. (2003). *Executive dysfunction in autism*, [online] Last accessed 9 November 2011 at: http://eprints.gold.ac.uk/2558/1/Hill_2004_GRO.pdf
- Hobson, R. P. (1993). *Autism and the Development of Mind*, Hove: Lawrence Erlbaum Associates
- Hobson, R. P. (2004). *The Cradle of Thought: Exploring the Origins of Thinking*, London: Pan Books
- Hobson, R. P. (2009). Wittgenstein and the developmental psychopathology of autism, *New Ideas in Psychology*, 27, 243-257
- Hobson, R. P., & Lee, A. (1989). Emotion-related and abstract concepts in autistic people: Evi-dence from the British Picture Vocabulary Scale, *Journal of Autism and Developmental Disorders*, 19, 601-623
- Holland, D.C. and Eisenhart, M.A. (1990). *Educated in Romance: Women, Achievement and College Culture*, Chicago & London: The University of Chicago Press
- Hollway, W. and Jefferson, T. (2000). *Doing Qualitative Research Differently*, London: Sage Publications
- Holmer Nadesan, M. (2005). *Constructing Autism: Unravelling the 'truth' and understanding the social*, Abingdon: Routledge
- Hu, Z., Chan, R. C. K. and McAlonan, G. M. (2010). Maturation of social attribution skills in typically developing children: an investigation using the social attribution task, *Behavioral and Brain Functions*, 6:10, 1-8
- Hughes, C. & Russell, J. (1993). Autistic children's difficulty with mental disengagement from an object: its implications for theories of autism. *Developmental Psychology*, 29:3, 498-510
- Hughes, J. A. (1977). Wittgenstein and social science: Some matters of interpretation, *The Sociological Review*, 25:4, 721-741

Hume, R. D. (1970). Kant and Coleridge on imagination, *The Journal of Aesthetics and Art Criticism*, 28:4, 485-496

Hutchby, I. and Wooffitt, R. (2008). *Conversation Analysis*, Cambridge: Policy

Hutto, D. D. (2003a). *Clarification and the end of philosophy*, [online] Last accessed 2 March 2012 at: <http://www.cavehill.uwi.edu/fhe/histphil/Philosophy/CHiPS/2005/papers/hutto.pdf>

Hutto, D. D. (2003b). Folk psychological narratives and the case of autism, *Philosophical Papers*, 32:3, 345-361

Hutto, D. D. (2007). The narrative practice hypothesis: Origins and applications of folk psychology, In (Ed.) Hutto, D. D. *Narrative and Understanding Persons*, Royal Institute of Philosophy Supplement: Cambridge University Press

Hutto, D. D. (2008). *Folk Psychological Narratives: The Sociocultural Basis of Understanding Reasons*, Cambridge, Massachusetts: The MIT Press

Hutto, D. D. (2008). The narrative practice hypothesis: clarifications and implications, *Philosophical Explorations*, 11:3, 175-192

Hutto, D. D. (2009a). Lessons from Wittgenstein: Elucidating folk psychology, *New Ideas in Psychology*, 27, 197-212

Hutto, D. D. (2009b). Folk psychology as narrative practice, *Journal of Consciousness Studies*, 16, 9-39

Ishisaka, Y. (2003a). Wittgenstein and Asperger syndrome: I. Did Wittgenstein have this syndrome? *Japanese Journal of Child and Adolescent Psychiatry*, 44:3, 231-251

Ishisaka, Y. (2003b). Wittgenstein and Asperger syndrome: II. Wittgenstein's cognitive styles, *Japanese Journal of Child and Adolescent Psychiatry*, 44:3, 252-275

Jaarsma, P. and Welin, S. (2011). Autism as a natural human variation: Reflections on the claims of the neurodiversity movement, *Health Care Analysis*, [online] Last accessed 2 February 2012 at: <http://www.springerlink.com.lcproxy.shu.ac.uk/content/d7w0381j0670x07u/fulltext.pdf>

Jacobs, B. H. (2011). *How can autistic intelligence be recognised and accommodated within an inclusive education framework?*, Ph. D., University of Leicester

Jefferson, G. (1996). On the poetics of ordinary talk, *Text and Performance Quarterly*, 16, 1-61

Jolley, K. D. (2007). Ordinary Language Philosophy, In (Ed.) Boundas, C. V. *The Edinburgh Companion to Twentieth-Century Philosophies*, Edinburgh: Edinburgh University Press

Jones, E. W. (1980). Richard III's disfigurement: A medical postscript, *Folklore*, 91:2, 211-227

Jordan, R. R. (1990). 'Me and You: A Problem for Autism?', in *Experimental Psychology*, pp. 157–71. Originally presented at the Durham Conference, UK. Proceedings obtainable from Autism Research Unit, School of Health Sciences, The University of Sunderland, Sunderland SR2 7EE, UK

Jordan, R. (1999). *Autistic Spectrum Disorders: An Introductory Handbook for Practitioners*, London: David Fulton Publishers

Jost, J. T. (1995). Toward a Wittgensteinian social psychology of human development, *Theory & Psychology*, 5, 5-25

Jurecic, A. (2007). Neurodiversity, *College English*, 69:5, 421-442

Kafka, F. (1914). *In the Penal Colony*, trans. Johnston, I. [online] Last accessed 11 October 2011 at: <http://www.kafka-online.info/in-the-penal-colony-page9.html>

Kafka, F. (1994). *The Trial*, trans. Parry, I., London: Penguin Books

Kafka, F. (1930/1999). *Letters to Felice*, in (Eds.) Heller, E. and Born, J., trans. Stern, J. and Duckworth, E., London: Vintage

Kaland, Mortensen and Smith, (2007). Disembedding performance in children and adolescents with Asperger syndrome or high-functioning autism, *Autism*, 11:1, 81-92,

Kaland, N., Callesen, K., Møller-Nielsen, A., Mortensen, E.L., and Smith, L. (2008). Performance of Children and Adolescents with Asperger Syndrome or High-functioning Autism on Advanced Theory of Mind Tasks. *Journal of Autism and Developmental Disorders*, 38:6, 1112-1123.

Kanner, L. (1943). Autistic disturbances of affective contact, *Nervous Child*, 2, 217-250

Kanner, L. (1946). Irrelevant and metaphorical language in early infantile autism, *The American Journal of Psychiatry*, 103, 242-245

Kanner, L. (1971). Follow-up study of eleven autistic children originally reported in 1943, *Journal of Autism and Childhood Schizophrenia*, 1, 119-145

Keightley, A. (1976). *Wittgenstein, Grammar and God*, London: Epworth Press

Kendon, A. (1982). The organization of behavior in face-to-face interaction: observations on the development of a methodology. In (Eds.) Scherer, K. R. and Ekman, P., *Handbook of Methods in Nonverbal Behavior Research*, Cambridge: Cambridge University Press

Kitzinger, C. (2000). Doing feminist conversation analysis, *Feminism and Psychology*, 10:2, 163-193

Klin, A., Jones, W., Schultz, R., and Volkmar, F. (2003). The enactive mind, or from actions to cognition: lessons from autism, *Philosophical Transactions of the Royal Society*, 358, 345-360

Kluth, P. and Shouse, J. (2009). *The Autism Checklist: A Practical Reference for Parents and Teachers*, San Francisco, CA: Jossey-Bass

* Kremer-Sadlik, T. (2004). How children with autism and Asperger Syndrome respond to questions: a 'naturalistic' theory of mind task, *Discourse Studies*, 6:2, 185-206

Lakoff, G. (1987). *Position paper on metaphor*, TINLAP-3, 173-176

Lakoff, G. (1993). The contemporary theory of metaphor, In (Ed.) Ortony, A. *Metaphor and Thought (2nd Ed.)*, Cambridge: Cambridge University Press

Lakoff, G. and Nunez, R. E. (2000). Conceptual Metaphor, In (Ed.) Geeraerts, D., *Cognitive Linguistics: Basic Readings*, New York, Mouton de Gruyter

Lakoff, G. (2009). *The neural theory of metaphor*, [online] Last accessed 14 November 2011 at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1437794

Lawson, J., Baron-Cohen, S., and Wheelwright, S. (2004). Empathising and systemising in adults with and without Asperger syndrome, *Journal of Autism and Developmental Disorders*, 34:3, 301-310

Lawson, W. (2001). *Understanding and Working with the Spectrum of Autism*, London: Jessica Kingsley Publishers

Lawson, W. (2011). *The Passionate Mind: How people with Autism Learn*, London: Jessica Kingsley Publishers

Lee, A., Hobson, R. P. and Chiat, S. (1994). I, you, me and autism: An experimental study, *Journal of Autism and Developmental Disorders*, 24:2, 155-176

Lequia, J. (2011). Motivation, interest, and attention: Re-defining learning in the autism spectrum?, *International Journal of Disability, Development and Education*, 58:4, 405-408

Lester, M. and Hadden, S. C. (1980). Ethnomethodology and grounded theory methodology: An integration of perspective and method, *Journal of Contemporary Ethnography*, 9, 3-33

Leudar, I. and Costall, A. (2004). On the persistence of the 'problem of other minds' in psychology: Chomsky, Grice and theory of mind, *Theory & Psychology*, 14:5, 601-621

Levinson, S. C. (1983). *Pragmatics*, Cambridge: Cambridge University Press

Levorato, M. C., Nesi, B. and Cacciari, C. (2004). Reading comprehension and understanding idiomatic expressions: A developmental study, *Brain and Language*, 91:3, 303-314

Linetsky, E., Planer, D. and Ben-Hur, T. (2000). Echolalia – palilalia as the sole manifestation of nonconvulsive status epilepticus, *Neurology*, 55:5, 733-734

Liss, M et al. (2001). Executive functioning in high-functioning children with autism. *Journal of Child Psychology and Psychiatry*, 42, 261-270

- Lizardo, O. (2004). The cognitive origins of Bourdieu's habitus, *Journal for the Theory of Social Behaviour*, 34:4, 375-401
- Local, J. and Wootton, T. (1995). Interactional and phonetic aspects of immediate echolalia in autism: A case study, *Clinical Linguistics and Phonetics*, 9, 155-184
- Locke, J. L. (1993). *The child's path to spoken language*, Cambridge, MA: Harvard University Press
- Locke, J. L. (1995). Development of the capacity for spoken language, In (Eds.) Fletcher, P. and MacWhinney, B. *The Handbook of Child Language*, Oxford: Blackwell
- Losh, M. and Capps, L. (2003). Narrativeability in high-functioning children with autism or Asperger's syndrome, *Journal of Autism and Developmental Disorders*, 33:3, 239-251
- Losh, M. and Capps, L. (2006). Understanding of emotional experience in autism: Insights from the personal accounts of high-functioning children with autism, *Developmental Psychology*, 42:5, 809-818
- Loukusa, S., Leinonen, E., Kuusikko, S., Jussila, K., Mattila, M-L., Ryder, N., Ebeling, H. and Moilanen, I. (2006). Use of context in pragmatic language comprehension by children with Asperger syndrome or high-functioning autism, *Journal of Autism and Developmental Disorders*, 37, 1049-1059
- Luckett, T., Powell, S D., Messer, D J., Thornton, M E', and Schulz, J. (2002). Do children with autism who pass false belief tasks understand the mind as active interpreter? *Journal of Autism and Developmental Disorders*, 32:2, 127-40
- Lynch, M. (1997). Ethnomethodology without indifference, *Human Studies*, 20, 371-376
- Lyons, V. and Fitzgerald, M. (2007). Asperger (1906-1980) and Kanner (1894-1981), the two pioneers of autism, *Journal of Autism and Developmental Disorders*, 37, 2022-2023
- McCann, J. and Peppé, S. (2003). Prosody in autism spectrum disorders: a critical review, *International Journal of Language and Communication Disorders*, 38:4, 325-350
- McCann, J., Peppé, S., Gibbon, F. E., O'Hare, A. and Rutherford, M. (2007). Prosody and its relationship to language in school-aged children with high-functioning autism, *International Journal of Language and Communication Disorders*, 42:6, 682-702
- McDonagh, P. (2005). *Autism and Modernism: an Inquiry into Aesthetics*, [online] Last accessed 29 September 2011 at: <http://societyforcriticalexchange.org/includes/pageContent/Archives/Archives2005/Autism%20and%20Representation%20Mcdonagh.htm>
- McDonagh, P. (2008). Autism and Modernism: A Genealogical Exploration, In (Ed.) Osteen, M. *Autism and Representation*, New York, NY: Routledge
- McGeer, V. (2001). Psycho-practice, psycho-theory and the contrastive case of autism: How practices of mind become second-nature, *Journal of Consciousness Studies*, 8, 109-132

- McGinn, C. (1984). *Wittgenstein: a religious point of view?*, London: Routledge
- McGinn, M. (1997). *Wittgenstein and the Philosophical Investigations*, London: Routledge
- McGrath, J. (2007). Reading autism, *Interdisciplinary Literary Studies*, 8:2, 100-113
- McHoul, A. (2005). Aspects of aspects: On Harvey Sacks's "Missing Book", Aspects of the Sequential Organization of Conversation (1970), *Human Studies*, 28, 113-128
- Macintosh, K.E. & Dissanayake, C. (2004). The similarities and differences between autistic disorder and Asperger's disorder: a review of the empirical evidence. *Journal of Child Psychology and Psychiatry*, 45:3, 421-434
- MacKay, G. and Shaw, A. (2004). A comparative study of figurative language in children with autistic spectrum disorders, *Child Language Teaching and Therapy*, 20, 13-32
- MacLeod, A. (2010). 'Welcome to my first rant!' Report on a participatory pilot project to develop the 'AS portal', an online peer support network for higher education students on the autism spectrum, *Journal of Assistive Technologies*, 4:1, 14-24
- Madriaga, M., Goodley, D., Hodge, N. and Martin, N. (2008). Enabling transition into higher education for students with Asperger syndrome, [online] Last accessed 23 November 2010 at: <http://shura.shu.ac.uk/1004/>
- Malcolm, N. (1989). Wittgenstein on language and rules, *Philosophy*, 64:247, 5-28
- Mar, R. A., Oatley, K. and Peterson, J. B. (2009). Exploring the link between reading fiction and empathy: Ruling out individual differences and examining outcomes, *Communications*, 34, 407-428
- Marcoulatos, I. (2003). John Searle and Pierre Bourdieu: Divergent perspectives on intentionality and social ontology, *Human Studies*, 26, 67-96
- Mayes, S. D., and Calhoun, S. L. (2003a). Ability profiles in children with autism: Influence of age and IQ, *Autism*, 6, 65-80
- Mayes, S. D., and Calhoun, S. L. (2003b). Analysis of WISC-III, Stanford-Binet: IV, and academic achievement test scores in children with autism, *Journal of Autism and Developmental Disorders*, 33, 329-341
- Mayes, S. D., and Calhoun, S. L. (2006). Frequency of reading, math and writing disabilities in children with clinical disorders, *Learning and Individual Differences*, 16, 145-157
- Mayes, S. D., and Calhoun, S. L. (2007). Learning, attention, writing, and processing speed in typical children and children with ADHD, autism, anxiety, depression, and Oppositional-Defiant Disorder, *Child Neuropsychology*, 13, 469-493
- Mayes, S. D., and Calhoun, S. L. (2008). WISC-IV and WIAT-II profiles in children with high-functioning autism, *Journal of Autism and Developmental Disorders*, 38, 428-439

- Maynard, D. W. and Peräkylä, A. (2003). Language and social interaction, in *Handbook of Social Psychology* (ed.) Delamater, J., New York: Kluwer Academic/Plenum Publishers
- * Maynard, D. W. (2005). Social actions, gestalt coherence, and designations of disability: Lessons from and about autism, *Social Problems*, 52:4, 499-524
- Medina, J. (2003). Wittgenstein and nonsense: Psychologism, Kantianism, and the habitus, *International Journal of Philosophical Studies*, 11:3, 293-318
- Melville, H. (2010). *Bartleby the Scrivener: A Story of Wall Street*, Brooklyn, NY: Melville House Publishing
- Merriam, S. (1998). *Qualitative Research and Case Study Applications in Education*, San Francisco: Jossey-Bass
- Miles, M. B. and Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook*, London: Sage
- Mills, B. (2008). Autism and the Imagination, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge
- Milton, D. (2012). *So what exactly is autism?*, [online] Last accessed 14 October 2012 at: http://www.aettraininghubs.org.uk/wp-content/uploads/2012/08/1_So-what-exactly-is-autism.pdf
- Molloy, H. and Vasil, L. (2004) *Asperger Syndrome, adolescence, and identity*. London: Jessica Kingsley
- Monaco, F., Servo, S., and Cavanna, A. E. (2009). Famous people with Gilles de la Tourette syndrome?, *Journal of Psychosomatic Research*, 67, 485-490
- Monk, R. (1990). *Ludwig Wittgenstein: The Duty of Genius*, London: Vintage Books
- Montgomery, D. E. (1997). Wittgenstein's private language argument and children's understanding of the mind, *Developmental Review*, 17, 291-320
- Mooney, M. E. (1982). Presocratic scepticism: Samuel Beckett's *Murphy* reconsidered, *ELH*, 49:1, 214-234
- Morgan, G. and Smircich, L. (1980) The case for qualitative research, *Academy of Management Review*, 5:4, 491-500
- Moss, J., Oliver, C., Arron, K., Burbidge, C. and Berg, K. (2009). The prevalence and phenomenology of repetitive behavior in genetic syndromes, *Journal of Autism and Developmental Disorders*, 39, 572-588
- Mottron, L. and Burack, J. A. (2001). Enhanced perceptual functioning in the development of autism, in (Eds.) Burack, J. A., Charman, T., Yirmiya, N., and Zelazo, P. R. *The development*

of autism: Perspectives from Theory and Research, Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers

Mottron, L., Burack, J. A., Iarocci Belleville, G. S. and Enns, J. (2003). Locally oriented perception with intact global processing among adolescents with high functioning autism: Evidence from multiple paradigms, *Journal of Child Psychology and Psychiatry*, 44, 906-913

Mottron, L., Burack, J. A., Stauder, J. E. and Robaey, P. (1999). Perceptual processing among high-functioning persons with autism, *Journal of Child Psychology and Psychiatry*, 40, 203-211

Mottron, L., Dawson, M., Soulières, I., Hubert, B. and Burack, J. (2006). Enhanced perceptual functioning in autism: An update, and eight principles of autistic perception, *Journal of Autism and Developmental Disorders*, 36:1, 27-43

Mruzek, D.W., Cohen, C. and Smith, T. (2007). Contingency Contracting with Students with Autism Spectrum Disorders in a Public School Setting, *Journal of Developmental and Physical Disabilities*, 19, 103-114

Murray, D., Lesser, M. and Lawson, W. (2005). Attention, monotropism and the diagnostic criteria for autism, *Autism*, 9:2, 139-156

Murray, S. (2008). Hollywood and the Fascination of Autism, in (Ed.) Osteen, M. *Autism and Representation*, New York, NY: Routledge

Murray, S. (2008). *Representing Autism: Culture Narrative, Fascination*, Liverpool: Liverpool University Press

* Muskett, T., Perkins, M., Clegg, J. and Body, R. (2010). Inflexibility as an interactional phenomenon: using conversation analysis to re-examine a symptom of autism, *Clinical Linguistics & Phonetics*, 24:1, 1-16

Nelson, K. (1981). Individual differences in language development: Implications for development and language, *Developmental Psychology*, 17:2, 170-187

Neumärker, K. J. (2003). Leo Kanner: his years in Berlin, 1906-24. The roots of autistic disorder, *History of Psychiatry*, 14:2, 205-218

Newman, S. J. (1996). Reflection and teacher education, *Journal of Education for Teaching*, 22:3, 297-310

Niemi, J, Hella, P., Otsa, L. and Niemi, J. (2011). Linguistic reflections of asocial language in dyadic discourse: studies in schizophrenia and Asperger, Proceedings of the Second Nordic Conference of Clinical Linguistics (NorClinLing 2011) held at the Sanna Hotel, Gran, Norway. University of Oslo

Noens, I. L. J. and van Berckelaer-Onnes, I. A. (2005). *Captured by details: sense-making, language and communication in autism*, [online] Last accessed 26 January 2012 at: <https://lirias.kuleuven.be/bitstream/123456789/216354/1/Captured%2Bby%2Bdetails%2Bfinal%2Bpdf.pdf>

- Norbury, C. F. (2004). Factors supporting idiom comprehension in children with communication disorders, *Journal of Speech, Language, and Hearing Research*, 47, 1179–1193
- Norbury, C. F. (2005). The relationship between theory of mind and metaphor: Evidence from children with language impairment and autistic spectrum disorder, *British Journal of Developmental Psychology*, 23, 383-399
- Nordquist, R. (2011). *Metaphor*, [online]. Last accessed 14 October 2011 at: <http://grammar.about.com/od/mo/g/metaphorterm.htm>
- Oatley, K. (1999). Why fiction may be twice as true as fact: Fiction as cognitive and emotional simulation, *Review of General Psychology*, 3:2, 101-117
- * Ochs, E., Kremer-Sadlik, T., Sirota, K.G. and Solomon, O. (2004). Autism and the social world: An anthropological perspective, *Discourse Studies*, 6:2, 147-183
- Ochs, E. and Schieffelin, B. B. (2009). Language acquisition and socialization: Three developmental stories and their implications, In (Ed.) Duranti, A. *Linguistic Anthropology: A Reader*, Chichester: Blackwell
- Ochs, E. and Solomon, O. (2004). Practical logic and autism, In (Eds.) Casey, C. and Edgerton, R. B. *A Companion to Psychological Anthropology: Modernity and Psychocultural Change*, Oxford: Blackwell
- Ochs, E. and Solomon, O. (2010). Autistic sociality, *Journal of the Society for Psychological Anthropology*, 38:1, 69-92
- Ochs, E., Solomon, O. and Sterponi, L. (2005). Limitations and transformations of habitus in child-directed communication, *Discourse Studies*, 7, 547-583
- Olafson, F. A. (1990). Habermas as a philosopher, *Ethics*, 100:3, 641-657
- Oliver, M. (2009). *Understanding Disability: From Theory to Practice*, Basingstoke: Palgrave MacMillan
- Olsen, L. (1986). Diagnosing Fantastic Autism: Kafka, Borges, Robbe-Grillet, *Modern Language Studies*, 16:3, 35-43
- O’Neil, W. M. (1968). *The Beginnings of Modern Psychology*, Harmondsworth, Middlesex: Penguin
- Ortega, F. (2009). The cerebral subject and the challenge of neurodiversity, *BioSocieties*, 4, 425-445
- Osteen, M. (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge
- Outhwaite, W. (Ed.) (1996). *The Habermas Reader*, Oxford: Polity
- Ozonoff, A. & Jensen, J. (1999). Specific executive function profiles in three neuro-developmental disorders. *Journal of Autism and Developmental Disorders*, 29:2, 171-177

Ozonoff, S., Pennington, B. F., & Rogers, S. J. (1990). Are there emotion perception deficits in young autistic children?, *Journal of Child Psychology and Psychiatry*, 31, 343-361

Paul, R., Augustyn, A., Klin, A. and Volkmar, F. R. (2005). Perception and production of prosody by speakers with autism spectrum disorders, *Journal of Autism and Developmental Disorders*, 35:2, 205-220

Pedersen, J. (2011). *Habermas' method: Rational reconstruction*, Ph. D., University of Bergen

Pellicano, E., Maybery, M., & Durkin, K. (2005). Central coherence in typically developing preschoolers: does it cohere and does it relate to mindreading and executive control? *Journal of Child Psychology and Psychiatry*, 46:5, 533-547

Peppé, S., Cleland, J., Gibbon, F., O'Hare, A., and Rutherford, M. (2007).

Peppé, S., McCann, J., Gibbon, F., O'Hare, A., and Castilla, P. M. (2011). Expressive prosody in children with autism spectrum conditions, *Journal of Neurolinguistics*, 24, 41-53

Peterson, C. and McCabe, A. (1994). A social interactionist account of developing decontextualized narrative skill, *Developmental Psychology*, 30:6, 937-948

Phelps, L. and Grabowski, J-A., (1991). Autism: A communiqué for the school psychologist, *School Psychology International*, 12, 299-314

Piaget, J. (1926). *The Language and Thought of the Child*, London: Kegan Paul, Trench, Trubner & Co

Pichler, H. (2010). Methods in discourse variation analysis: Reflections on the way forward, *Journal of Sociolinguistics*, 14:5, 581-608

Pichler, H. and Levey, S. (2010). Variability in the co-occurrence of discourse features, *Language Studies Working Papers*, 2, 17-27

Pijnacker, J., Hagoort, P., Buitelaar, J., Tuenisse, J-P. and Geurts, B. (2009). Pragmatic inferences in high-functioning adults with autism and Asperger syndrome, *Journal of Autism and Developmental Disorders*, 39, 607-618

Pitcher, G. (1964). *The Philosophy of Wittgenstein*, Englewood Cliffs, NJ: Prentice-Hall

Poetry Foundation (2011). *Samuel Beckett, 1906-1989*, [online] Last accessed 13 October 2011 at: <http://www.poetryfoundation.org/bio/samuel-beckett>

Portway, S. M. and Johnson, B. (2005). Do you know I have Asperger's syndrome? Risks of a non-obvious disability, *Health, Risk & Society*, 7:1, 73-83

Portway, S. and Johnson, B. (2010). Asperger syndrome and the children who don't quite fit in', *Early Child Development and Care*, 173:4, 435-443

Potter, J. (2001). Wittgenstein and Austin, in *Discourse Theory and Practice*, (Eds.) Wetherall, M., Taylor, S. and Yates, S. J., London: Sage [online] Last accessed 27 December 2011 at: http://people.ucsc.edu/~gwells/Files/Courses_Folder/documents/Wittgenstein-Austin.pdf

Potter, J. and Reicher, S. (1987). Discourses of community and conflict: The organization of social categories in accounts of a 'riot', *British Journal of Social Psychology*, 26, 25-40

Priestley, M. (1998). Constructions and creations: idealism, materialism and disability theory, *Disability & Society*, 13:1, 75-94

Prior, M., Dahlstrom, B., & Squires, T-L. (1990). Autistic children's knowledge of thinking and feeling states in other people, *Journal of Child Psychology and Psychiatry*, 31, 587-601

Prizant, B.M. (1983). Language acquisition and communicative behavior in autism: toward an understanding of the 'whole' of it, *Journal of Speech and Hearing Disorders*, 48, 286-296

Psathas, G. (1995). *Conversation Analysis: The Study of Talk-in-Interaction*, Thousand Oaks, CA: Sage

Quayson, A. (2010). Autism, narrative, and emotions: On Samuel Beckett's *Murphy*, *University of Toronto Quarterly*, 79:2, 838-864

Racine, T. P. and Muller, U. (2009). The contemporary relevance of Wittgenstein: Reflections and directions, *New Ideas in Psychology*, 27, 107-117

Rajendran, G. and Mitchell, P. (2007). Cognitive theories of autism, *Developmental Review*, 27:2, 224-260

Rapin, I. and Dunn, M. (1997). Language disorders in children with autism, *Seminars in Pediatric Neurology*, 4:2, 86-92

Rapley, M. (2004). *The Social Construction of Intellectual Disability*, Cambridge: Cambridge University Press

Reich, W. (2010). Three problems of intersubjectivity—and one solution, *Sociological Theory*, 28:1, 40-63

Reindal, S.M. (2008). A social relational model of disability: a theoretical framework for special needs education?, *European Journal of Special Needs Education*, 23:2, 135-146

* Rendle-Short, J. (2003). Managing interaction: A conversation analytic approach to the management of interaction by an 8 year-old girl with Asperger's syndrome, *Issues in Applied Linguistics*, 13:2, 161-186

Rendle-Short, J., Johanna.rendle-short@anu.edu.au. (2011a). *Managing interaction: A conversation analytic approach to the management of interaction by an 8 year-old girl with Asperger's syndrome*, [email] Message to N. P. Chown (nick@chown.fsbusiness.co.uk). Sent Wednesday 21 September 2011, 00:19. Available at: TO BE ADDED [Accessed 21 September 2011]

Rendle-Short, J., Johanna.rendle-short@anu.edu.au. (2011b). *Managing interaction: A conversation analytic approach to the management of interaction by an 8 year-old girl with Asperger's syndrome*, [email] Message to N. P. Chown (nick@chown.fsbusiness.co.uk). Sent Wednesday 21 September 2011, 22:46. Available at: TO BE ADDED [Accessed 22 September 2011]

* Rendle-Short, J. (in press). Using conversational structure as an interactional resource: Children with Asperger's Syndrome and their conversational partners, In (Eds.) Arciuli, J. and Brock, J., *Communication in Autism, Trends in Language Acquisition Research Series*, (Accepted for publication TO BE ADDED)

Rennie, J. T. (1988). Grounded theory methodology: The pressing need for a coherent logic of justification, *Theory and Psychology*, 8, 101-119

Rice, J. (2011). *Radiohead and Samuel Beckett*, [online]. Last accessed 13 October 2011 at: <http://brum-review.blogspot.com/2011/03/radiohead-and-samuel-beckett.html>

Riemann, cited in Ritchey, T. (1991). Analysis and synthesis: on scientific method based on a study by Bernhard Riemann, *Systems Research*, 8:4, 21-41, (Revised 1996) [Online]. Last accessed 22 October 2012 at: www.swemorph.com/pdf/anaeng-r.pdf

Riessman, Catherine Kohler (2005) Narrative Analysis. In: *Narrative, Memory & Everyday Life*, University of Huddersfield, Huddersfield, 1-7

Robson, C. (2002). *Real World Research*, Oxford: Blackwell Publishing

Roth, I. (2008a). Imagination and the Awareness of Self in Autistic Spectrum Poets, In Osteen, M., (Ed.) (2008). *Autism and Representation*, New York, NY: Routledge

Roth, I. (2008b). Autism and the imaginative mind, *British Academy Review*, 11, 18-20

Rundblad, G. and Annaz, D. (2010). The atypical development of metaphor and metonymy comprehension in children with autism, *Autism*, 14:1, 29-46

Russell, M. (2011). On Habermas's critique of Husserl, *Husserl Studies*, 27, 41-62

Russell, J., Saltmarsh, R., and Hill, E. (1999). What do executive factors contribute to the failure on false belief tasks by children with autism? *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40:6, 859-68

Ryan, S. and Räisänen, U. (2009). "It's like you are just a spectator in this thing": Experiencing social life the 'aspie' way, *Emotion, Space and Society*, 1:2, 135-143

Rydell, P. J and Mirenda, P. (1994). Effect of high and low constraint utterances on the production of immediate and delayed echolalia in young children with autism, *Journal of Autism and Developmental Disorders*, 24:6, 719-735

Sacks, H, Schegloff, E. A. and Jefferson, G. (1974). A simplest systematics for the organization of turn-taking for conversation, *Language*, 50:4, 696-735

- Sacks, H. (1989). Lecture one: Rules of conversational sequence, *Human Studies*, 12, 217–27
- Sacks, O. (1995). *An Anthropologist on Mars: Seven Paradoxical Tales*, [online]. Last accessed 14 October 2011 at: <http://www.keepandshare.com/doc/2003635/oliver-sacks-an-anthropologist-on-mars-1995-pdf-june-23-2010-2-57-pm-669k?dn=y>
- Sage, V. (1975). Innovation and continuity, in (Ed.) Worth, K. *Beckett the Shape Changer*, London: Routledge & Kegan Paul
- Saldert, C. and Hartelius, L. (2011). Echolalia or functional repetition in conversation – a case study of an individual with Huntington’s disease, *Disability and Rehabilitation*, 33:3, 253-260
- Schalkwyk, D. (1995). Fiction as a “grammatical” investigation: A Wittgensteinian account, *The Journal of Aesthetics and Art Criticism*, 53:3, 287-298
- Schegloff, E. A. (1987). Between micro and macro: contexts and other connections, in (Eds.) Alexander, J. C., Giesen, B., Munch, R. and Smelser, N. J., *The Micro-Macro Link*, Berkeley, CA: University of California Press
- Schegloff, E. A. (2000). Overlapping talk and the organization of turn-taking for conversation, *Language in Society*, 29, 1-63
- Schegloff, E. A., Koshik, I., Jacoby, S. and Olsger, D. (2002). Conversation analysis and applied linguistics, *Annual Review of Applied Linguistics*, 22, 3-31
- Scheler, M. (1954). *The nature of sympathy*, London: Routledge and Kegan Paul
- Schieffelin, B. B. and Ochs, E. (1986). Language socialization, *Annual Review of Anthropology*, 15, 163-191
- Schmidt, R. (1994). Deconstructing consciousness in search of useful definitions for applied linguistics, in (Eds.) Hulstijn, J. H. and Schmidt, R. *Consciousness in Second Language Learning*, *AILA Review*, 11, 11-26
- Schneider, W. L. (2000). The sequential production of social acts in conversation, *Human Studies*, 23, 123-144
- Schreibman, L., Koegel, L. K. and Koegel, R. L. (1989). Autism, in (Ed.) Hersen, M. *Innovations in Child Behavior Therapy*, New York: Springer-Verlag
- Schuler, A. L. and Fletcher, E. C. F. (2002). Making Communication Meaningful: Cracking the Language Interaction Code, In (Eds.) Gabriels, R. and Hill, D. *Autism: From Research to Practice*, London: Jessica Kingsley Publishers
- Schutz, A. (1962). *Collected Papers I: The Problem of Social Reality*, The Hague: Martinus Nijhoff
- Seaman, A. (1991). Food for thought - hindsight in history, *Nutrition Bulletin*, 16:2, 102-110

- Searle, J. R. (1992). *The Rediscovery of the Mind*, Cambridge, MA: The MIT Press
- Searle, J. R. (1995). *The Construction of Social Reality*, London: Penguin Books
- Searle, J. R. (1997). *The Mystery of Consciousness*, New York: New York Review Books
- Seedhouse, P. (2005). Conversation analysis as research methodology, In (Eds.) Richards, K. and Seedhouse, P. *Applying Conversation Analysis*, New York: Palgrave Macmillan
- Seelig, A. (2000). Beckett's Dying Remains: The Process of Playwriting in the Ohio Impromptu Manuscripts, *Modern Drama*, 43:3, [online] Last accessed 11 October 2011 at: <http://www.samuel-beckett.net/remains3.html>
- Seemann, A. (2008). Person perception, *Philosophical Explorations*, 11:3, 245-262
- Segerdahl, P. (1998). Scientific studies of aspects of everyday life: the example of conversation analysis, *Language & Communication*, 18, 275-323
- Shaw, L.L. (1991). Stigma and the moral careers of ex-mental patients living in board and care, *Journal of Contemporary Ethnography*, 20, 285-305
- Shepard, N. (2010). *Rewiring difference and disability - narratives of Asperger's syndrome in the twenty-first century*, Ph. D., Bowling Green State University
- Shotter, J. (2004). Wittgensteinian developmental investigations, *Behavioral and Brain Sciences*, 27, 121-122
- Sinclair, J. cited in Bagatell, N. (2010). From cure to community: transforming notions of autism, *Ethos*, 38:1, 33-55
- Sinclair, M. B. W. (1974). *Language-games in the later philosophy of Ludwig Wittgenstein*, [online] Last accessed 30 September 2011 at: <http://researcharchive.vuw.ac.nz/handle/10063/795>
- Sirota, K. G. (2004). Positive politeness as discourse process: politeness practices of high-functioning children with autism and Asperger syndrome, *Discourse Studies*, 6:2, 229-251
- Skoyles, J. R. (2011). *Autism, context/noncontext information processing, and atypical development*, [online] Last accessed 17 November 2011 at: <http://downloads.hindawi.com/journals/aurt/2011/681627.pdf>
- Slors, M. and Macdonald, C. (2008). Rethinking folk-psychology: alternatives to theories of mind, *Philosophical Explorations*, 11:3, 153-161
- Smeijsters, H. (2006). Research in practice. *Music Therapy Today*, VII, 781-838
- Smith, C. P. (2000). Content Analysis and Narrative Analysis. In *Handbook of Research Methods in Social and Personality Psychology*, (ed.) H. T. Reis and C. M. Judd. Cambridge: Cambridge University Press

Smith-Myles, B., Rome-Lake, M., Barnhill, G. P., Huggins, A., Hagiwara, T., and Griswold, D. E. (2003). Written language profile of children and youth with Asperger syndrome: From research to practice, *Education and Training in Developmental Disabilities*, 38, 362–369

Smukler, D. (2006). *Unanticipated speech and autism*, Ph. D., Syracuse University

Smukler, D. and Ferguson, P. (2005). Unauthorized minds: How ‘theory of mind’ theory misrepresents autism, *Mental Retardation*, 43:1, 11-24

* Solomon, O. (2008). Language, autism, and childhood: An ethnographic perspective, *Annual Review of Applied Linguistics*, 28, 150-169

Solomon, O. and Bagatell, N. (2010). Autism: Rethinking the possibilities, *Ethos*, 38:1, 1-7

Speer, L., Cook, A., McMahon, W., and Clark, E. (2007). Face processing in children with autism. *Autism*, 11:3, 265-277

Stanford, A. (2003). *Asperger Syndrome and Long-Term Relationships*, London: Jessica Kingsley Publishers

* Sterponi, L. (2004). Construction of rules, accountability and moral identity by high-functioning children with autism, *Discourse Studies*, 6:2, 207-228

* Sterponi, L. and Fasulo, A. (2010). “How to go on”: Intersubjectivity and progressivity in the communication of a child with autism, *Ethos*, 38:1, 116-142

Steuber, K. R. (2005). How to think about rules and rule following, *Philosophy of the Social Sciences*, 35, 307-323

* Stiegler, L. N. (2007). Discovering communicative competencies in a nonspeaking child with autism, *Language, Speech and Hearing Services in Schools*, 38, 400-413

Stodden, R.A., and Mruzek, D.W. (2010). An introduction to postsecondary education and employment of persons with autism and developmental disabilities, *Focus on autism and Other Developmental Disabilities*, 25:3, 131-133

Storoschuk, S., Lord, C., and Jaedicke, S. (1995). *Autism and the use of mental verbs*. Presented at the Society for Research in Child Development, Indianapolis IN

Strauss, A. and Corbin, J. (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Newbury Park, CA: Sage

* Stribling, P. and Rae, J. (2010). Interactional analysis of scaffolding in a mathematical task in ASD, in (Eds.) Gardner, H. and Forrester, M., *Analysing Interactions in Childhood: Insights from Conversation Analysis*, Chichester: John Wiley & Sons

* Stribling, P., Rae, J. and Dickerson, P. (2006). “Spelling it out”: The design, delivery, and placement of delayed echolalic utterances by a child with an autistic spectrum disorder, *Issues in Applied Linguistics*, 15:1, 3-32

* Stribling, P., Rae, J. and Dickerson, P. (2007). Two forms of spoken repetition in a girl with autism, *International Journal of Language & Communication Disorders*, 42:4, 427-444

* Stribling, P., Rae, J. and Dickerson, P. (2009). Using conversation analysis to explore the recurrence of a topic in the talk of a boy with an autism spectrum disorder, *Clinical Linguistics & Phonetics*, 23:8, 555-582

Strydom, P. (1999). Triple contingency: The theoretical problem of the public in communication societies, *Philosophy & Social Criticism*, 25:2, 1-25

Strydom, P. (2001). The problem of triple contingency in Habermas, *Sociological Theory*, 19:2, 165-186

Surian, L., Baron-Cohen, S. and Van der Lely, H. (1996). Are children with autism deaf to Gricean maxims?, *Cognitive Neuropsychiatry*, 1:1, 55-71

Szatmari, P. (2004). *A Mind Apart: Understanding Children with Autism and Asperger Syndrome*, London: The Guilford Press

Tarplee, C. and Barrow, E. (1999). Delayed echoing as an interactional resource: a case study of a 3-year-old child on the autistic spectrum, *Clinical Linguistics & Phonetics*, 13:6, 449-482

Tager-Flusberg, H. (1992). Autistic children's talk about psychological states: Deficits in the early acquisition of a theory of mind, *Child Development*, 63:1, 161-172

Tager-Flusberg, H. (2001). Understanding the language and communicative impairments in autism, *International Review of Research in Mental Retardation*, 23, 185-205

Tager-Flusberg, H., and Sullivan, K. (1994). Predicting and explaining behavior: A comparison of autistic, mentally retarded and normal children, *Journal of Child Psychology and Psychiatry*, 35, 1059-1075

Tan, J., & Harris, P. L. (1990). Autistic children understand seeing and wanting. Unpublished paper, University of Oxford

* Tarplee, C. and Barrow, E. (1999). Delayed echoing as an interactional resource: a case study of a 3-year-old child on the autistic spectrum, *Clinical Linguistics & Phonetics*, 13:6, 449-482

Taylor, N. and Loughrey, B. (1989). Murphy's surrender to symmetry, *Journal of Beckett Studies*, [online] Last accessed 6 October 2011 @ http://english.fsu.edu/jobs/num1112/079_TAYLOR.PDF

Thomas, C. (2006). Disability and gender: Reflections on theory and research, *Scandinavian Journal of Disability Research*, 8:2, 177-185

Thoreau, H. D. (1995). *Walden; or, Life in the Woods*, New York: Dover Publications

- Timmons, S. (2006). Wittgenstein's language games as a theory of disability, *Nursing Philosophy*, 7, 20-22
- Trimbur, J. (1987). Beyond cognition: The voices in inner speech, *Rhetoric Review*, 5:2, 211-221
- Tuzzi, A., Cemin, M. and Castagna, M. (2004). "Moved deeply I am" Autistic language in texts produced with FC, *Journées Internationales d'Analyse Statistique des Données Textuelles*, 7, 1097-1105
- Tyrer, F., McGrother, C. W., Thorp, C. F., Taub, N. A., Bhaumik, S. and Cicchetti, B. V. (2008). The Leicestershire Intellectual Disability Tool: A simple measure to identify moderate to profound intellectual disability, *Journal of Applied Research in Intellectual Disabilities*, 21, 268-276
- van Dijk, T. A. (1996). Discourse, cognition and society, *Discourse & Society*, 7:1, 5-6
- Vance, M. and Wells, B. (1994). The wrong end of the stick: language-impaired children's understanding of non-literal language, *Child Language Teaching and Therapy*, 10, 23-46
- Verte, S. et al. (2006). Executive functioning in children with an autistic spectrum disorder: can we differentiate within the spectrum? *Journal of Autism and Developmental Disorders*, 36:3, 351-368
- Vinden, P. G. and Astington, J. W. (2000). Culture and Understanding Other Minds, in (Eds) Baron-Cohen, S., Tager-Flusberg, H. and Cohen D. J. *Understanding Other Minds: Perspectives from Developmental Cognitive Neuroscience*, Oxford: Oxford University Press
- Volden, J. (2004). Conversational repair in speakers with autism spectrum disorders, *International Journal of Language and Communication Disorders*, 39:2, 171-189
- Volden, J. and Sorenson, A. (2009). Bossy and nice requests: Varying language register in speakers with autism spectrum disorder (ASD), *Journal of Communication Disorders*, 42, 58-73
- Vygotsky, L. (1934). *Thought and Language*, Cambridge, Massachusetts: The MIT Press
- Walker, A. and Fitzgerald, M. (2006). *Unstoppable Brilliance: Irish Geniuses and Asperger's Syndrome*, Dublin: Liberties Press
- Waltz, M. (2005). Reading case studies of people with autism spectrum disorders: a cultural studies approach to issues of disability representation, 20:4, 421-435
- Wearing, C. (2010). Autism, metaphor and relevance theory, *Mind & Language*, 25:2, 196-216
- Webb, E. (1970). *Samuel Beckett, A Study of His Novels*, London: Peter Owen
- Wechsler, D. (1997a). *Manual for the Wechsler Adult Intelligence Scale (3rd ed.)*. San Antonio, TX: Psychological Corporation

Wechsler, D. (1997b). *Wechsler Adult Intelligence Scale (3rd ed.)*. San Antonio, TX: Psychological Corporation

* Wells, B. and Local, J. (2009). Prosody as an interactional resource: A clinical linguistic perspective, *International Journal of Speech-Language Pathology*, 11:4, 321-325

* Wells, B., Corrin, J. and Local, J. (2008). Prosody and interaction in atypical and typical language development, *Travaux neuchâtelois de linguistique*, 49, 135-151

Wetherby, A. M. (1986). Ontogeny of communicative functions in autism, *Journal of Autism and Developmental Disorders*, 16:3, 295–316

Wetherby, A. M., Schuler, A. L., and Prizant, B. M. (1997). Enhancing language and communication development: Theoretical foundations. In Cohen, D. J. and Volkmar, F. R. (Eds.), *Handbook of autism and pervasive developmental disorders* (2nd ed.), New York: Wiley

Wevrick, P. (1986). The role of echolalia in children with various disorders: An overview and treatment considerations, *Human Communication Canada*, 10:3, 25-29

Whiteley, O. *The Fairyland Around Us*,

Williams, D. (1992). *Nobody Nowhere: The Extraordinary Autobiography of an Autistic*, New York: Times Books

Williams, D. (1996). *Autism – An Inside-Out Approach*, London: Jessica Kingsley Publishers

Williams, E. (2004). Who really needs a ‘theory’ of mind? : An interpretative phenomenological analysis of the autobiographical writings of ten high-functioning individuals with an autism spectrum disorder, *Theory & Psychology*, 14:5, 704-724

Willey, L. H. (1999). *Pretending to be Normal: Living with Asperger’s Syndrome*, London: Jessica Kingsley Publishers

Wing, L. (1996). *The Autistic Spectrum*, London: Robinson

Wing, L. (2003). *The Autistic Spectrum*, London: Constable & Robinson

Wittgenstein, L. (1922). *Tractatus Logico-Philosophicus*, [online] Last accessed 30 September 2011 at: <http://filepedia.org/files/Ludwig%20Wittgenstein%20-%20Tractatus%20Logico-Philosophicus.pdf>

Wittgenstein, L. (1958). *Philosophical Investigations*, Oxford: Blackwell

Wittgenstein, L. (1967). *Zettel*, Berkeley: University of California Press

Wittgenstein, L. (1980). *Remarks on the philosophy of psychology*, Oxford: Blackwell

Wodak, R. (2001). The discourse-historical approach, in (Eds.) Wodak, R. and Meyer, M., *Methods of Critical Discourse Analysis*, London and Thousand Oaks, CA: Sage

Wooffitt, R. (2005). *Conversation Analysis and Discourse Analysis: A Comparative and Critical Introduction*, London: Sage Publications

Wootton, A. J. (1997). *Interaction and the Development of Mind*, New York: Cambridge University Press

* Wootton, A. J. (1999). An investigation of delayed echoing in a child with autism, *First Language*, 19, 359-381

* Wootton, A. J. (2002). Interactional contrasts between typically developing children and those with autism, Asperger's syndrome, and pragmatic impairment, *Issues in Applied Linguistics*, 13:2, 133-159

World Health Organization. (1993). *The ICD-10 classification of mental and behavioural disorders; diagnostic criteria for research*, Geneva: World Health Organization

Wray, A. and Perkins, M. R. (2000). The functions of formulaic language: an integrated model, *Language and Communication*, 20, 1-28

Wright, B. J. (2009). Pragmatics and language deficits in children with high-functioning autism spectrum disorder, in *Speech Pathology & Audiology Capstone Anthology* [online] Last accessed 28 October 2011 at: <http://spa.wvu.edu/r/download/78053#page=195>

Young, R. A. and Collin, A. (2004). Introduction: Constructivism and social constructionism in the career field, *Journal of Vocational Behavior*, 64, 373-388

Zahavi, D. and Gallagher, S. (2008). The (in)visibility of others: a reply to Herschbach, *Philosophical Explorations*, 11:3, 237-244

APPENDIX A

CONVERSATION ANALYSIS TRANSCRIPTION SYMBOLS

The transcription symbols used here are common to conversation analytic research, and were developed by Gail Jefferson. The following symbols are used in the data.

- (0.5) The number in brackets indicates a time gap in tenths of a second.
- (.) A dot enclosed in a bracket indicates pause in the talk less than two tenths of a second.
- .hh A dot before an 'h' indicates speaker in-breath. The more 'h's, the longer the in-breath.
- hh An 'h' [without a preceding dot, NC] indicates an out-breath. The more 'h's the longer the breath.
- (()) A description enclosed in a double bracket indicates a non-verbal activity. For example ((banging sound))
- A dash indicates the sharp cut-off of the prior word or sound.
- ::: Colons indicate that the speaker has stretched the preceding sound or letter. The more colons the greater the extent of the stretching.
- () Empty parentheses/brackets indicate the presence of an unclear fragment on the tape.
- (guess) The words within a single bracket indicate the transcriber's best guess at an unclear fragment.
- . A full stop indicates a stopping fall in tone. It does not necessarily indicate the end of a sentence.
- Under Underlined fragments indicate speaker emphasis.
- ↑↓ Pointed arrows indicate a marked falling or rising intonational shift. They are placed immediately before the onset of the shift.
- CAPITALS With the exception of proper nouns, capital letters indicate a section of speech noticeably louder than that surrounding it.
- °° Degree signs are used to indicate that the talk they encompass is spoken noticeably quieter than the surrounding talk.

Thaght	A 'gh' indicates that word (sic) in which it is placed had a guttural pronunciation.
> <	'More than' and 'less than' signs indicate that the talk they encompass was produced noticeably quicker than the surrounding talk.
=	The 'equals' sign indicates contiguous utterances.
[Square brackets between adjacent lines of concurrent speech
]	indicate the onset (and end) of a spate of overlapping talk.

A more detailed description of these transcription symbols can be found in Atkinson and Heritage (1984: ix-xvi)

(Wooffitt, 2005, pp. 211-212)

In addition to the above transcription symbols, in view of the present use in the context of autism I have added the following symbols to indicate aspects of body language.

→	An arrow pointing right indicates gaze direction towards the other participant where there are only two participants.
→AB	An arrow pointing right and code letters indicate gaze direction towards another participant where there are more than two participants, the code letters indicating the participant to whom gaze is directed.
←	An arrow pointing left indicates gaze direction away from the other participant(s).
☺	A 'smiley face' indicates some kind of self-stimulation ('stimming').

APPENDIX B

CONVERSATION ANALYSIS FRAGMENTS

1. Don's inability to infer a particular socio-cultural meaning without a prompt²³⁹

- Don: [Hey mommy =
Hans: [()
Don: = can I ask you a question
in Old Yeller real quick?
Mother: *((turns to Don, chewing))*
What?
Don: Um-
((circles the table surface with his finger, chewing))
(0.8)
when the rooster crowed um-
(.)
how come (.) Arliss did this?
"Uh:::" *((stretches arms wide and grimaces))*
Like that: when the roo- =
Mother: =Well what does it mean
when the rooster crows (.) in the morning? =
Don: =It's time to wake up?
Mother: *((chewing))*
Right
(.)
What do you think (.) Arliss was saying?
Don: Not ri:ght now::.
((uses an exaggerated low tone of voice))
Mother: He di:dn't want to wake up↑
(.)
He was saying,
"O:ne mo:re mi:nute."
((using an exaggerated, low tone of voice))=
Don: =(hhh) Yeah (hh)

2. Adam's inability to comprehend a particular indexical relation²⁴⁰

- Adam: She says, she says-
'This WAS

²³⁹ Ochs et al., 2007, p. 167.

²⁴⁰ Ochs et al., 2007, pp. 169-170.

the first time you were riding a bike.
[WASN'T it, Philip?
[[*(gesticulates with both hands)*]]

This WA:S isn't it?

[And- and- and then,
[[*(change in voice, calmly)*]]
and Papu goessays
uh- says uh-
['Well- BUT-'
[[*(change of voice to imitate grandfather, calmly)*]]
[You know how Yaya doesn't like that-
[[*(calm tone, back to own voice)*]]
['JUST ANSWER THE QUESTION!
[[*(imitating grandmother's voice)*]]
'It's the FIRST time'=

Mother: [=She should have been a lawyer.=
[[*(shakes finger, knowingly)*]].

Adam: ='It's the first time he rides a bike.
Are you SU::RE?'

Father: It's true! *(laughs)*

Mother: She really should have been.
She could have easily been a District Attorney.

Father: **Or a detective of [some type].**

Mother: [That's where she missed her call-

Father: And her skills- she had skills for that.

Mother: She had ALL the skills to be it.
((Adam, who has been rocking up to this point, stops))

Yeah. Yeah. Easily.

[That's too bad.

[[*(thoughtfully)*]]

Adam: [She FINDS things easily?
[[*(intently looking into mother's face)*]]

Mother: Yeah.

She is- that's too bad=

Adam: **DeTECTIVE, see! =**

Mother: [=That's what she should have been=
[[*(pensively, points finger in Adam's direction)*]]

Adam: = *((stretches arm across the table,
points finger close to mother's face, with excitement))*

[A DE-TECT-IVE! =

[[*(waves hands, very excited, speaking abruptly)*]].

Mother: =A District Attorney or a detective.

Adam: **She can find things EASily you know!**

An- an- anyway- so- uh.

[She looks (through pockets all the time).

[[*(whispering conspiratorially to mother)*]]

Mother: [[*(laughs)*]]

Father: [[*(laughs)*]]

APPENDIX C

A REINTERPRETATION OF A PIECE OF TALK-IN-INTERACTION

Stribling et al. (2006) have interpreted as “possibly ‘echolalic’” (p. 16) the utterance “excuse me got an ‘o’ in it” (Line 9)” (p. 16) and, further on, state their view that “the utterance appears to undertake an abrupt change in topic, mainly from talk relating to the robot’s conduct to talk about spelling” (p. 16). I think this may be a misinterpretation. If the sequence is simplified it can be seen that the robot (R) says “excuse me please” to which the boy (L) responds “How d’you know where I am”. Then, after the facilitator (T) says “Cuz its got little sensors on it”, L asks “why it say excuse?”, says (what has been transcribed as) “Excuse me got an ‘O’ in it”, to which T responds “No, excuse me hasn’t got an ‘O’ in it”. R then says “hello there” and L responds “Hello ‘as”. There is another way of interpreting this exchange if L says “Excuse me got a ‘know’ in it” rather than the authors’ transcription “Excuse me got an ‘O’ in it”. If my interpretation of this phrase is what L actually said then, instead of his having changed topic abruptly what happened was this:

- The boy asks the robot how it knows where he is and then asks the facilitator why the robot said “excuse me”;
- Seeking to answer his own question by wondering if the robot said ‘excuse me’ because it knows where he is the boy asks if “excuse me got a ‘know’ in it?”;
- The facilitator misunderstands the boy’s comment (quite reasonably) and corrects what she assumed was his misspelling of ‘excuse’ with an ‘O’ in it;
- Following which the robot says “hello there” and the boy, correctly, and perhaps with some humour, says that ‘hello’ has an ‘O’ in it!

My interpretation may not be correct but I feel it is as likely to be correct as the authors' version. I shall discuss echolalia later as part of an overview of autistic methods of talk-in-interaction so, after the transcription of the sequence the authors, I believe mistakenly, interpret as delayed echolalia²⁴¹, I shall move on to a review of another article.

Extract 1 (Aurora Pairs 14:56:53-14:57:16)

Non-Vocal Activity

Above Line of Talk: Speaking participant

Below Line of Talk: Non-speaking

1 R: excuse me please ((monotone))

2 (-----)
└──────────┘

L: ((looks up towards T))

((looks down towards R))
|
3 L: ↑ How d'you know where I am

4 (-----)
|
L ((looks up at T))

5 R: hello the re ((monotone))
└┬─Cuz its got ↑ little sensors on it°
|
L ((looks down towards R))

R ((moving towards C))

6 (-----+-----+-----+-----) └──┘

²⁴¹ I think it is possible there is an AS sense of humour in play here rather than echolalia. I have written to the lead author of the article – Dr Penny Stribling – advising her of my interpretation of this particular passage of conversation and giving her an opportunity to comment on the matter. I have yet to hear from her.

┌

*C ((leans forwards extending arms))

((sitting up))

┌

7 L: why it say:[excuse?]

R: hello there

|

*C ((grasps R))

8 (-----+-----)

┌

L ((brings LH up to face))

((stands up, spreads hands))

9 L: <EXCUSE me got : an O:W IN IT:>

10 (-----+-----)

┌

L ((looks down))

11T: No: (.) ↑ excuse me ↑ hasn't got an o:w in it

R: [excuse me please]

((looks up))

12L: HELLO 'AS

R: hello there (.) hello there ((monotone))

13 (-----)

L x ((starts clapping))

((starts 'stiff' running))

xxxxx

14L: urhrrrhhhhhhh

(Stribling et al., 2006, pp. 14-16)

APPENDIX D

THE VALUE OF IN-DEPTH CONVERSATION ANALYSIS

An example from Sterponi and Fasulo (2010) on intersubjectivity and progressivity in the communication of a child with autism (such as this one in which AARON is the child) show that “or else,” if responded to, generates a slot (B2) for a further move:

A1: directive or exhortative (“do x,” “let’s do x”)

B1: “or else” appendor question

A2: consequences (“y will happen”)

B2: expression of stance in relation to consequences (“I want y”/“I don’t want y”)

A3: ...

(ibid., p. 128)

Example 2b – Tape #7 Perfection Game

- | | | |
|---|----------|---|
| 1 | SHELLY | Okay. Okay go ((pushes down platform; timer starts clicking)) |
| 2 | AARON | Look o:ut. |
| 3 | SHELLY | All ri:ght. Let’s see if we can go= |
| 4 | AARON | =Pretty fa:st |
| 5 | SHELLY | If we can go fast |
| 6 | AARON → | Or e::lse |
| 7 | SHELLY → | Or else it will pop up on us |
| 8 | AARON | Really? (.) Right, ((laughing)) |
| 9 | SHELLY | Ri::ght. |

- 10 AARON Or else (*smiling*)
- 11 SHELLY It will go pop [and it will be really scary
- 12 AARON *[((giggles))*
- 13 SHELLY Oh. (*pretend screaming; high pitch*) A::h A::h
- 14 AARON → I don't want it- (.) I DON'TWANT IT TO POP
- 15 SHELLY NO I don't ei:ther
- 16 AARON → I don't want it to pop

(*ibid.*, pp. 125/6)

APPENDIX E

INTEGRATING CONVERSATION ANALYSIS AND PROSODY PROFILING

In the following example of the Wells and Local ‘integrated’ CA transcription technique the ‘prosodic contour’ of a child’s speech is incorporated as a graphic with the transition within ‘tone units’ – from the ‘red’ that indicates that the speaker has the ‘floor’ through ‘yellow’ when other speakers may get ready to talk to ‘green’ which marks a transition relevance place in the conversation – are shown as highlights and underlining (dark grey for red; light grey for a yellow; broken underlining for green). Wells and Local write that “By carrying out the type of analysis illustrated ... it is possible to establish whether the client/child already uses prosodic features systematically in order to regulate turn exchange, and whether the co-participants orient to his use of prosodic features, even if these do not yet coincide with the prosodic system of the adult speech community” (Wells and Local, 2009, p. 325).

```
1 M: || whose turn is it ||  
      (1.5)  
2     || whose turn is it ||  
      (1.5)  
3     || whose turn is it ||  
      < lento >  
      (.)  
      _____  
      \         /  
      /         \  
→  
4 K:  turn is it  
      < lento >  
      _____  
      \         /  
      /         \  
→  
5 M:  || whose turn is it ||  
      _____  
      \         /  
      /         \  
→  
6 K:  Kevin's turn  
      <f>  
7 M:  || honest ||  
      ((Kevin shakes dice))  
8 M:  || that's got Kevin ||
```

Extract 1: Kevin: Kevin’s turn” (Fragment 11: Local & Wootton, 1995 – adapted)

(Wells and Local, 2009, p. 322)

APPENDIX F

DAVID SMUKLER'S ALTERNATIVE AUTISM 'TRIADS'

The participants in my study construct autism much differently than the way it is constructed in conventional professional or popular narratives about autism. In Chapter 3, I presented Bobby's lists of three problems and three benefits that he attributed to autism:

(What is bad about having autism)

You cant stop making sounds. want tovery much bequeit.

Really hatrd to. awake. yes. autism is part ofwhatpeople think of me they think iam dstupid.

takes really along time togetmy homework done.

(What is good about having autism)

yes beig really smart andd really loving.

people like mesomuch.

being so understanding of what is important.

The first problem ("cant stop making sounds") relates to feeling out of control over his body and his communication with others. The second problem seems not to be the result of autism per se, but of the social stigma that attaches to being different. The third may sound like a common teenage complaint, but also relates to Bobby's autism and communication because of the length of time he needs to communicate, and his frustration about feeling out of sync with others. Perhaps we could look at Bobby's list as another "triad of impairments," but it certainly does not map neatly onto those constructed by Wing (1981b). Furthermore, Bobby's construction of autism creates an alternative to definitions of autism based on deficiency by including a second "triad" of surprising positive characteristics. He attributes both his intelligence and being "loving" to autism. He also sees a flip side to being stigmatized ("people like mesomuch"), which suggests that, at least in Bobby's community, autism sometimes appears to create a certain social magnetism. And, like many other people who live with significant differences, Bobby constructs autism as teaching him to appreciate what matters most in life, that is, to treat many daily concerns and distractions as relatively trivial and increase awareness of the importance of things like caring and commitment.

(Smukler, 2006, pp. 212-213)