

'Using Rancière, Deleuze and Foucault to re-imagine research with children on the Autism Spectrum in Scottish primary schools'

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This thesis is dedicated to my late uncle, James O'Brien who passed away on 22nd December 2018 aged only 58. From an early age, he taught me to value education and that potential was only limited by imagination.

Abstract

This study sets out to address the gap in the research literature where the voices of children on the Autism Spectrum have been routinely excluded and ignored. Drawing on Ranciére (1999), it is argued that children on the Autism Spectrum are a 'policed' group within education and therefore a 'political' response to this is required. To develop this political response, Ranciére's (1991) Ignorant Schoolmaster is used as a theoretical resource to critically question traditional constructions of emancipation. The limitations of Ranciére's construction of emancipation are identified and it is argued that his subject is exclusive because it is restricted to rational speaking beings.

The research moves beyond Ranciére's (1991), by recognising the inclusive value in the term 'communication' as opposed to 'voice'. As a result, a social justice lens is taken up underpinned by diversity, participation and communication. To genuinely attend to the voice of children on the Autism Spectrum, Visual Narrative and diaries are used and adapted based on individual communicative preferences. The research also captures the views of wider stakeholders using semi-structured interviews.

The data is analysed through a Thematic Analysis (TA). In contrast to traditional approaches to TA, the work of Deleuze and Guattari (2001) is employed to inform a 'mapping' approach to the analysis. To challenge medicalised understandings of Autism found within the data set, the work of Gilles Deleuze (1988) and Michel Foucault (1979) are used to rupture these discourses and provide tools to think differently.

Two main themes are developed from the TA. Deleuze's (1988) concept of Virtuality is used to provide an alternative way of understanding challenging behaviour. This theory opens-up thinking that allows behaviour to be understood through a creative lens thus allowing for a greater array of positive solutions. In addition, Foucault's (1979) theory of 'Governmentality' is used as a theory to think through the sonic

understandings that dominated the narratives. A revised theory of Brown and McIntyre's (1993) Normal Desirable State (NDS) is put forward, placing the child at the centre as opposed to the adult.

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Chapter 1: Children on the Autism Spectrum are a Policed Group in Education

'Inclusive, good-quality education is a foundation for dynamic and equitable societies'

Desmond Tutu

1.1 Introduction

This thesis begins by arguing that children on the Autism Spectrum are a 'policed' group in education. They are marginalised within the existing research literature, with research predominantly done 'to' rather than 'with' them (Humphrey and Lewis 2008). Similar trends can be found within the policy context with a dominant neoliberal ideology serving to dilute social justice aims thus ensuring that a 'deficit' perspective of children on the Autism Spectrum prevails (Tomlinson 2012). Furthermore, due to the lack of research studies that take on board the views of parents of children on the Autism Spectrum and the educators who work with them, they can also be defined as examples of 'policed' groups.

This chapter begins by examining the current landscape of inclusive education and situates this within the wider policy context. It then proceeds by exploring existing research literature related to the voices of children on the Autism Spectrum. Existing studies with regard to (i) the voice of children on the Autism Spectrum, (ii) their teachers' perceptions, (iii) the views of parents and (iv) those of Teacher Assistants (TAs) are reviewed. The Scottish policy landscape is then explored and the gaps within the research literature are contextualised, illustrating the way in which children on the Autism Spectrum and other key stakeholders are 'silenced' and 'policed' with a 'deficit' model of Autism prevailing. This research draws upon the work of Ranciére (1999) to provide an opening for research that is politically driven and challenges these injustices.

1.2 Inclusive Education Policy

This study can be directly situated in the ensemble of policies that promote the inclusion of all children in Scottish mainstream schools. *The Standard in Scotland's Schools etc. Act 2000* outlines that 'unless exceptional circumstances apply, then children should be educated within mainstream'. The development of mainstreaming policy has its roots in The Salamanca Statement where the governments of 92 governments and 25 international organisations agreed upon a consensus for educating children, youths and adults with special educational needs within 'regular' education. It stated that 'those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs' (UNESCO 1994). It is against this backdrop that there has been a remarkable growth in the number of children with Special Educational Needs accessing mainstream classrooms which includes those on the Autism Spectrum pertinent to this study. There has been an exponential growth in the number of children identified as having additional support needs with a 153% increase between 2010 and 2016 (Education Skills Committee 2017).

Within the policy context, the presumption of mainstream is presented in an unproblematic way and the advantages and disadvantages of such a move are not captured within the policy framework. The ideology of mainstreaming has produced some heated debates within the academic literature with confusion between policy rhetoric and practice on the ground. Goränsson and Nilholm (2014) argue that the disconnect between policy and practice has important consequences for learners, teachers and researchers of inclusion. It is no surprise that such confusion exists with the original driver of inclusive education within the United Kingdom, Mary Warnock rejecting her initial thesis. In 1978 she published Warnock Report which pushed forward a construction of inclusion that went beyond integration with access to mainstream education being about increasing participation and removing barriers to participation (Barton 1997). However, in 2005 she came full circle rejecting the idea of inclusion citing that it had been a big mistake that has had a detrimental impact on learners with Additional Support Needs. She argued that while inclusion may be an ideal for society it may not be for schools. Baroness Warnock stated that

it has left a disastrous legacy which children on the Autism Spectrum have not benefited arguing for the building of new special schools that can meet their need for a reassuring and personal environment.

Inclusion is a term that is contested across the educational terrain and often has been identified as meaning different things to different groups of people. The term is powerful and highly contestable used to different effect by politicians, bureaucrats and academics (Clough and Corbett 2000). Consequently, inclusion ends up meaning everything and nothing at the same time (Armstrong, Armstrong and Spandagou 2010). Inclusion is not a single movement and due to the multi-faceted nature of the field, this thesis draws upon the four key perspectives including i) a rights-based approach, ii) inclusion as a political struggle, iii) a values-based approach and iv) inclusion as an ongoing matter of contention and struggle.

The first of these is a rights-based approach to inclusion. Within this model of thinking, inclusion is understood on the basis that a continuum of provision is available to meet individual need and retained within this is the notion of placements in special schools, special units and special classes. Participation is granted to certain groups but on the condition that this does not impact on the majority. Smith (1998) argues that for some professionals, the rights of the individual contrasts with that of the common good. The 'common good' is safeguarded by 'clauses of conditionality' (Slee 1996) which shapes who can and cannot participate. Limitations set on participation within mainstream contexts therefore position special education, special units and special classes as a mechanism for advancing the goals of inclusion retaining those who fit a narrowly framed criterion. Such constructions lend themselves to the adaptation of ableist perspectives and further entrench exclusion. Ableism is defined by Storey (2007) as a form of prejudice that is common in schools and society. He argues that whilst dominant, it is often overlooked in why students with disabilities have not been included.

In contrast, Leo and Barton (2006) identify inclusion as a political struggle. They highlight the constraints placed on schools by the wider policy context and argue that school leadership and school development have limited power for achieving inclusive practice. This is especially the case for schools working within the most deprived communities where the number of children with Special Educational Needs is higher. Whilst they refrain from offering a definitive solution to the challenges identified, they recommend that the key to inclusive education is 'moral leadership' which acknowledges the values of social inclusion. The moral values of inclusion are identified as key in tackling disadvantage and underachievement.

Ainscow, Booth and Dyson's (2006) Index for Inclusion articulates a number of inclusive values which they identify as being at the heart of inclusion. A range of values are highlighted as being pivotal to inclusion including 'equity', 'participation', 'community', 'compassion', 'respect for diversity', 'sustainability' and 'entitlement'. For them, inclusive schools are the ones prepared to engage in change. Through a values-based approach, it is argued that schools can overcome barriers to inclusion. This approach resonates with UNESCO who argue that it is not about a child fitting into a system but instead requires schools to employ 'a range of changes and modification in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to education all children '(UNESCO 2005, pg. 13).

Despite the appeal of such an approach to inclusion, exclusion may therefore be framed as the combined outcomes of individual faults, failing schools, where incompetent teachers have 'low expectations', fail to make learning 'exciting' enough or assume the 'wrong roles' (Alexiadou 2002, pg. 76). However, Armstrong et al. (2010) whilst acknowledging that this approach is pragmatic recognise the tension inherent in balancing what is 'achievable' at a given time within a given set of resources with what is ultimately 'desirable'.

Dan Goodley (2007) draws on post-structuralist thinking to de-centre the politically and socially charged terms of 'disability' and 'impairment'. He connects these terms to current pedagogy which he sees as being constructed in an unjust way due to the impact of market forces. To challenges this, he draws upon the work of Deleuze and Guattari to support the development of inclusive pedagogies that are more socially just. He draws upon their concept of 'rhizome' to reframe pedagogies as 'becomings' rather than 'beings' thus opening up resistant spaces and potential territories of social justice.

Similarly, Allan (2008) draws upon post-structuralist thinkers (Foucault, Deleuze and Guattari and Derrida) putting their theories to work on inclusion. She uses the concepts of 'subverting', 'subtracting' and 'inventing' to reframe inclusion as a struggle for participation rather than something that is done to children and young people. Inclusion becomes a continuous struggle as opposed to a fixed outcome. By adopting this view of inclusion, teachers are able to transgress their sense of frustration and guilt and engage in a process that is continuous and contested. The second half of this thesis draws inspiration from this way of engaging with the challenges of inclusion.

1.3 Review of the Literature

1.3.1 Review of Voice Literature

Over the last two decades, a new sociology of childhood has emerged from strong critiques of the child development and family studies paradigms. Through these developments, there has been a recognition of children's agency and rights (Kay and Tisdall 2012). With this shift, it has become commonplace for researchers to promote children's voices which in turn have become a powerful political tool in gaining attention for children's issues. Despite this welcome shift, children's perspectives are still widely absent from investigations of their experiences with a number of minority groups such as; younger children of pre-school, children with Social Emotional and Behavioural Difficulties (SEBD) and disabled children including

those on the Autism Spectrum routinely excluded from research. This section proceeds with a brief outline of some of the research that has elicited the views of younger children of pre-school children and those with SEBD. It then proceeds to elicit the current research literature for children on the Autism Spectrum.

1.3.2 Voices of Children with Social, Emotional and Behavioural Difficulties

Children with Social, Emotional and Behavioural Difficulties (SEBD) are often at risk of exclusion and have limited opportunities to join the debates in matters that affect them directly (O'Connor et al. 2009). It has been argued that due to the challenges they present with, it is often easier not to hear than it is to hear this group as their communication can be unconventional and their social status marginal (Corbett 1998). Despite this, there have been some efforts to engage with this marginalised group and to ascertain their views on education. Sellman (2009) conducted a research study with a group of children placed within an SEBD Special School. He created a Student Research Group within the school to explore their current approaches to behaviour. By drawing directly on the voices of the children, a number of key messages came through such as the need for consistency, positive relationships and communication. Within the study, he highlighted a disconnect between the perceptions of children and adults. Similar findings came through in a study by de Leeuw et al. (2018) who carried out research with 28 socially excluded children of primary school age. They adopted a semi-structured interview approach and through this provided space for children to talk about their experiences. They found that there was difference between the approaches taken by the adults to resolve conflict and the approaches the children saw as most desirable. Within this body of literature, it has been identified that girls are even more marginalised as they transgress social and gender norms. Nind et al. (2012) recognised this and through the use of novel digital and visual methods such as comic strips and videos sought out the views on girls who had experienced exclusion. Through creative engagement with these methods, the girls in the study were able to share their experiences of inclusion and exclusion within their lives.

1.3.3 Voices of Younger Children

The voices of young children are not often attended to with Murray (2017) arguing that the ways in which younger children communicate can be at odds with those preferred by adults. Despite being a marginalised group, there have been a range of studies that have used creative methodologies to access the views of younger children. Often cited and used frequently in Early Childhood Studies is the Mosaic Approach developed by Alison Clark (2001). This approach was developed as a way of paying attention to the voices of young children under the age of 5. To get close to the children's lived experiences, a range of methods are used within the Mosaic Approach including child conferencing, photography and mapping activities. These approaches have provided a space for children to share their experiences and enjoy success.

Similar to Clark (2001), Einarsdottir (2005) also adopts the use of visual methodologies to gather the perspectives of younger children. Working from an Icelandic perspective, she set out to ascertain the views of 5 and 6 year olds attending pre-school. Through the use of photo elicitation, children were provided a space to discuss the places and things that were important to them. Similarly, Hilppo et al. (2016) working within a pre-school setting in Finland found that child generated photographs and drawings were powerful tools to explore agency and enabled participation within research. More recently, Breathnach et al. (2017) carried out a study within an ethnographic framework to explore the experiences of children within their first year of school in Australia. By drawing on children's narratives obtained through video-recorded observations, it was highlighted that participation within school activities was shaped by adult agendas and opened-up debate with regard to creating genuine participation.

1.3.4 Voices of Children on the Autism Spectrum

Children with disabilities are often overlooked as legitimate research participants in their own right (Cunningham-Burley 2008). As a result, there is a widespread assumption that disabled children lack the skills not only to act in their own best interest, but also to make their views known in a comprehensible way (Morris 1999). Significantly, children on the Autism Spectrum are even less likely to be included due to the deficit framings often attributed to this group. Kirby (2015) argues that perceived difficulties in social communication, social interaction and imagination make the prospect of working with this group especially daunting for some researchers. Consequently, the voices of children on the Autism Spectrum are significantly under-represented within existing research literature. Indeed, for younger children on the Autism Spectrum, their voices are effectively non-existent. Existing research has tended to focus on older, cognitively more able children where researchers have employed variations of traditional interview as the main method. A review of these existing studies allows us to establish the gap in the literature that this research both identifies and seeks to address. It also leads us to an understanding that the field of research is underdeveloped.

Researchers and practitioners should not assume that young disabled children (including those with little or no speech) have nothing to say (Beresford 1997). Daniel and Billingsley (2010) examined the perceptions of 7 children on the Autism Spectrum between the ages of 10 and 14. They used semi-structured interviews as their primary data source and took into account individual requirements as part of the process. Strategies that the children were already familiar with - such as visual supports and fidget toys - were employed successfully to aid the interviews. Similarly, Browning et al. (2009) and Saggers et al. (2011) used interview as their primary data source when seeking out the views of children placed at secondary school. Unfortunately, neither study seemed to reflect fully on the challenges of research with children on the Autism Spectrum. Given that the researchers use traditional methods with minimal adaptation, this would suggest that the participants were selected because they could access the method rather than the method being adjusted to fit the participant. While these studies provided individuals on the Autism Spectrum an opportunity to have their voices heard, researchers have, so to speak, played it safe, selecting individuals who would be able to follow the conventions of a traditional interview format.

Preece and Jordan (2010) also drew on the use of interviews but went further with the adaptations they made to include all children within the sample. They sought to elicit children's views and experiences of their day within the Short Breaks Service for 14 children aged 7-18. Significant adjustments were made not only for the wide range of communication styles within the group, but a variety of supports were also utilised and, where required, strategies such as visual schedules (Mesibov et al. 2005), photographs and a Picture Exchange Communication System (Frost and Bondy 2002) - all commonplace within practices to support children with communication and language difficulties. In addition, two children in this study had limited intentional communication and were restricted to the use of motoric gestures and pre-symbolic objects (Ockelford 1993). The authors argued on both practical and ethical grounds that the best way to include these children was through being present with them. Hwang (2014) also uses visual aids and works with children's self-determined communication modes to assist them in accessing interviews within her study. She contends that her research provides an example of the method beings selected to fit the child rather than the child being selected for the method. While she employs a variety of creative methods within the interview such as drawing to elicit discussion, she, like Jordan and Preece (2010) merely refracts traditional methods rather than responding to the challenge to think and practice differently.

Humphrey and Lewis (2008) move beyond the traditional interview in recognising the social anxieties that may be present for some children on the Autism Spectrum within a secondary school context. They use Mertens' (2009) Transformative Paradigm as a framework to explore the views and experiences of 20 children on the Autism Spectrum in English schools. The authors take into account and make adjustments for impairments consistent Autism and the uniqueness of the individual pupils taking part in the study. Methods employed include pupil dairy and pupil drawings which served to reduce the anxieties associated with interview. This served to reduce the social anxieties of participants and, through being able to include a broader range of participants, can result in increased validity of findings.

The authors also demonstrated further awareness by approaching sensitive topics, such as bullying, with great care and recognised the impact their research may have had on the participants. The data was analysed using Interpretative Phenomenological Analysis (Smith and Osborn 2007) and this enabled the authors to explore in great depth the key meanings experiences and events held for the research participants. The Humphrey and Lewis (2008) study was highly influential in shaping this doctoral thesis due to the focus it had on ethical practice with young people on the Autism Spectrum and demonstrated ways in which research could break with traditional method.

It is evident from the small body of research examined that this group of authors all recognised the need to provide opportunities for voice and agency for children on the Autism Spectrum. However, there appears to be a lack of non-traditional research methods which has in turn limited the number and quality of studies in this field. The literature suggests that researchers are continually trying to adjust traditional methods such as interviews even when their use fails to include all and may not be appropriate for those who participate. In other words, the use of such methods is inappropriate on both ethical and procedural grounds. There is, moreover, a significant lack of research with younger children on the Autism Spectrum and this, coupled with the ethical and methodological problematics identified here, points to the desirability of finding a fresh way of eliciting the voices of children on the Autism Spectrum within research.

1.4 Teacher Perceptions of Inclusion for Children on the Autism Spectrum

Before taking up the challenge posed by the state of existing research with regard to eliciting the views of children on the Autism Spectrum, it is necessary to consider teachers' attitudes to these children and young people given how central they are within their education. Avramidis et al. (2000) identify teachers' attitudes as being one of the biggest barriers to the inclusion of children with disabilities within mainstream education. Teachers' attitudes towards inclusion vary with their perception of the specific disability as well as the stress demands this may place

upon them personally (Soodak, Powell and Lehman 1998). When teachers have positive attitudes towards inclusion, they are more likely to differentiate their planning and are more confident they can meet the needs of the child (Avramidis et al. 2000). Conversely, when teachers have negative attitudes towards inclusion and are reluctant to have children with disabilities in their classroom, they may not provide the supports perceived as necessary to create an inclusive environment. Soodak, Powell and Lehman (1998) also found that there was a correlation between the quality of instruction and the attitude of the teachers towards inclusion. Teachers who had positive attitudes towards inclusion demonstrated better quality of instruction when compared to those who had negative attitudes. Lopes et al. (2004) conclude that children with special needs present serious challenges to teachers because they can be perceived as difficult, time consuming and frustrating. Whilst some studies have explored teacher attitudes towards the inclusion of children with disabilities, the body of research that discusses teachers' attitudes towards children on the Autism Spectrum is very limited. A possible reason for this is that it is only in recent decades there has been a proliferation of children on the Autism Spectrum included within mainstream schools. There are two significant studies in this area: Emam and Farrell (2009) and Humphrey and Symes (2013), each of which warrants more in-depth attention.

Emam and Farrell (2009) examine teacher's perspectives on the support provided for children on the Autism Spectrum in three primary schools and five secondary schools in North West England. The authors were explicit about their choice of a multiple case study design which was underpinned by their assumption that research is idiographic and shaped by the researcher's interpretivist views of the phenomenon under investigation. Semi-structured interviews were used with teachers and teaching assistants while open-ended field notes were used in non-participant observations of teacher-pupil interactions. A combination of case study analytic strategies (Yin 2003), thematic analysis (Boyatzis 1998) and a grounded theory analytic approach (Charmaz 2006) was used to make sense of data. It was found that the tensions held by teachers about support for pupils on the Autism Spectrum was shaped by manifestations associated with diagnosis. Pupil difficulty with recognition of emotions impacted on their relationships with teachers as they found it

difficult to differentiate at an appropriate level during their teaching practice.

Teachers relied heavily on Teaching Assistants (TAs) for this group and this also had an impact on the relationship that was developed. The authors questioned the benefits of TAs and highlighted a range of other supports that may be more beneficial.

Similarly, Humphrey and Symes (2013) explored the views of secondary teachers in England. They surveyed 53 participants including senior leaders, Special Educational Needs Coordinators (SENCo) and class teachers across 11 schools. Data was analysed using quantitative methodology. The data presented highlighted that the teachers were able to cope with the behaviours of children on the Autism Spectrum when they had previous experience and teachers with less experience of working with this group found it more difficult to include. The teachers involved in the study articulated that the behaviour that was most challenging was the display of inappropriate emotions and the study therefore called for more teacher training in this area. While the study makes a significant contribution to a very small body of research, it is limited by the predetermined categories used to define behaviours and it would have benefited from greater flexibility during data collection for participants to define their own behaviour categories. This would have allowed individual ways of understanding emotions embedded within the existing culture to come through instead of closing these down through pre-determined assumptions about what emotional understanding and language is used within this context (Feldman Barrett 2018).

Extant research that explores the views of teachers on the inclusion of learners on the Autism Spectrum is therefore as limited in scope as that which aims to elicit the views of children on the Autism Spectrum. In the light of this, a secondary aim of this research is therefore to contribute to this underdeveloped area of research by seeking out the views of teachers in relation to the inclusion of children on the Autism Spectrum who are participants in this study. This research will draw upon the views of Scottish primary school teachers and therefore make an original

contribution to knowledge in this area as well as helping to contextualise data created with the children.

1.5 Parental Views on Inclusion of Children on the Autism Spectrum

Parents play a pivotal role in their child's educational and therefore it is an aim of this study to take on board parental perspectives. Parental perspectives on inclusion can be seen to be shaped by a social model of analysis. Runswick-Cole (2008) found that parents who tended to lean towards an individualised and medicalised notion of inclusion had preferences for special education. This was in contrast to parents who focused on removing barriers to learning who had a preference for mainstream (at least in the early years). In a comparative study by Kasari et al. (1999) that drew on the views of parents with children on the Autism Spectrum and Down Syndrome, the parents of children on the Autism Spectrum were less positive about their children being educated in mainstream while the parents in the Down group were generally more positive about mainstreaming. Furthermore, it highlighted that parents of younger children and those already placed within mainstream are generally more positive about inclusion. However, parents of children on the Autism Spectrum already placed in special schools did not have such a positive view of mainstream. Central to parental views on inclusion is the necessity for staff being trained at the right level to support their child. With the correct training in place, many parents recognised the potential benefits of inclusion in mainstream (Jindel-Snape et al. 2005).

Across a number of studies, parents attribute the successful inclusion of their child with the quality of communication between home and school (Frederickson et al. 2004, Whitaker 2007). Good communication is seen as paramount for inclusion with it being linked to high levels of parental satisfaction (Whitaker 2007); conversely, when communication is not perceived as going well, it can have the opposite effect. Despite this focus on home school communication in the literature, Whitaker (2007) goes on to argue that we should proceed with caution when drawing on parental satisfaction as an indicator of the child's needs being adequately addressed.

Parental satisfaction has direct links to the relationship the parent has with the school and the quality of communication they receive and is no guarantee that their child is being adequately educated. In addition, Warrington and Reid (2006) found that parents credited school social factors, school commitment and Local Education Authority (LEA) supports such as funding as fundamental to successful inclusion.

Parallel to the body of research on teacher's perspectives, the parental literature highlights the importance of teacher training. Jindel-Snape et al. (2005) surveyed parents of children in both mainstream and special schools - there was a consensus that whatever educational provision is provided, it is essential that staff are trained properly. The importance of teacher skill sets is echoed by Falkner et al. (2015) who, following their survey of parents, concluded that teachers are seen as playing a critical role in the inclusion of children on the Autism Spectrum and identify teachers as being able to break down barriers by promoting positive peer relationships and in preventing bullying. The parents in their survey also identified the wider societal context as being of vital importance with adequate funding and legislative framework being a prerequisite for inclusive education.

Parents of disabled and typically developing children are important stakeholders in the inclusion process – the inclusion of children on the Autism Spectrum hinges on their support (Vaughn et al. 1996). Equally, parents of typically developing children report that inclusion helps their child to learn about and accept individual differences (Gallagher et al. 2000). In a study by Lindsay et al. (2008) looking at the experiences of teachers working with children on the Autism Spectrum, it was identified that they saw a lack of engagement from parents as a limiting factor in how successful the school was at meeting needs.

1.6 Teaching Assistants and Children on the Autism Spectrum

Teaching Assistants (TAs) are often identified as being key to the inclusion of children with additional support needs and have been broadly recognised for their commitment, loyalty and work ethic that is often far beyond the financial remuneration they receive (Harris 2017). TAs often have a role either supporting children on the Autism Spectrum on an individual basis or as part of a whole class remit. Their skill sets are highly valued by teachers who often see TAs as critical to the successful inclusion of children with disabilities (Rose 2001). Despite this, current evidence suggests that TAs have little and inconsistent impact on overall attainment scores for children with SEN (Howes 2003). Similarly, Emam and Farrell (2009) raised questions regarding how useful TAs were in supporting children on the Autism Spectrum. These concerns are echoed across a number of studies with Giangreco (2013) also raising a number of issues with regard to the ways in which TAs are used to support inclusion in practice;

Teacher assistants are not used wisely in inclusive classrooms, but rather metaphorically as a band aid for an injury that at least requires stitches and possibly major surgery; no band aid, regardless of type of size will meet the need.

Giangreco (2013) cautions that TAs have become 'the way' rather than 'a way' of supporting children with SEN in mainstream classes. His caution is not a surprise as there is evidence that the more support children get, the less progress they make (Blatchford, Bassett and Brown et al. 2009). Furthermore, the literature also suggests that being overly supported may discourage pupils from working independently and lead to an over-reliance on adult help (Howes 2003).

While the body of research raises concerns about the effectiveness of TAs, Symes and Humphrey (2011) found that TAs were often inhibited by access to expertise. In addition, they could at times be hindered depending on the attitude, views and skills of the teacher they were supporting. Not only is their voice silenced within the school setting, but more widely within research for children on the Autism Spectrum. Given that they are identified as a key support for this group of learners, it is important that their views are considered as a key stakeholder when exploring the experiences of children on the Autism Spectrum. Despite concerns raised around

their effectiveness and the outcomes they produce, they are within the current education system, a key support for children on the Autism Spectrum. It is essential therefore that their views are considered as part of the perspectives on children on the Autism Spectrum.

This research is interested in the role that TAs play within the education of children on the Autism Spectrum in this study. While current research looks at how effective they are taking into account their views in relation to teachers and other stakeholders, there has been limited work that takes into account their views regarding direct work with children on the Autism Spectrum. This research recognises that TAs are directly involved in supporting children on the Autism Spectrum and unless there is a significant revision of policy this will continue. It is therefore essential that their views are captured and valued.

1.7 Policy Context

1.7.1 Policy Tensions within Scottish Context

Consistent with wider global constructions of educational purpose, there are inherent tensions across the Scottish policy context and the analysis that follows will illustrate the way in which the dominance of a neoliberal ideology plays out. This will be demonstrated through a reading of The National Improvement Framework: Achieving Excellence and Equity (Scottish Government 2016a) and Curriculum for Excellence (2009). The prevailing neoliberal ideology leads to a redefinition of education in terms of a narrow set of concerns about the development of human capital with education seen as fundamental in meeting the needs of the global economy and ensuring the competitiveness of the national economy (Rizvi and Lingard 2010, pg.3).

The National Improvement Framework: Achieving Excellence and Equity (Scottish Government 2016a) is the Scottish Government's response to Improving Schools in Scotland: An OECD Perspective (OECD 2015). Consistent with wider patterns

within policy development across the world, the Scottish Government have situated themselves against the international benchmarks that dominate global education (Rizvi and Lingard 2010, pg. xii). At a global level, the OECD has been involved in helping to specify the skills and competencies that give contemporary human capital its value and has become a prominent actor in education policy globally due to its measurement and comparison of skills within nations (Stellar and Lingard 2013). The OECD's influence has led to the crystalizing of the 'education for human capital' discourse that is dominant within advanced nations such as Scotland. In this model, better educated countries are seen to produce more skilled workers for knowledge-based economies. This in turn is seen to be central in the further generation of wealth (Walker 2012).

In response to the OECD report, the Scottish Government identified a number of improvement drivers for Scottish Education. Improvements to data and evaluation at all levels were identified with the Assessment of Children's Progress' driver occupying a leading position. Despite the progressive nature of the policy, it introduces changes that have implications for all children but particularly those with Additional Support Needs (ASN), (the term used in Scotland since the Additional Support for Learning Act (2004)). This term replaced the more widely used term of Special Educational Needs (SEN) that is used across the rest of the UK and beyond. It reintroduces standardised testing to work alongside other measures including teacher judgment and the moderation of ongoing classwork (Scottish Government 2016a). While it recognises the need to support children on the Autism Spectrum at an individual level through use of their Individual Education Plan (a plan tailored to the needs of an individual child with set targets), this in practice is an additional measurement, not an alternative. This increase in measurements can be best captured by what Stephen Ball (2003) describes as 'policy technologies' designed to regulate teacher performance. Ball (2003) goes on define performativity as a 'technology, a culture and mode of regulation that employs judgments, comparisons and displays as means of incentive, control, attrition and change – based on rewards and sanctions (both material and symbolic)'. This conflict between government policy focused on pre-determined standards shaped towards a specific neoliberal agenda, make it challenging for schools to be more inclusive (Evans and Lunt 2002).

In addition, due to the increased measurements employed, these can also be framed as technologies of surveillance. Foucault (1979) argues these surveillance technologies create a 'normalising gaze' making it possible to qualify, to classify and to punish. Within this system teachers' values are either challenged or displaced by the technologies imposed upon them (Ball 2003).

Since the introduction of Curriculum for Excellence and the move away from national testing which was part of the now defunct 5-14 Curriculum, Scottish education has avoided some of the accountability features consistent with policy development elsewhere in the UK and has until this point avoided a move towards national testing. Such a replication of accountability can be seen as an example of 'policy mobility' which Peck and Theodore (2010) suggest is the movement of policies not in a distinct and compact form or bundle but rather a piecemeal fashion which are then (re)assembled in particular ways, in particular places and for particular purposes (Peck and Theodore 2010 in Ball, Junemann and Santori 2017 pg. 4).

Within the National Improvement Framework (Scottish Government 2016a), the policy language suggests that it is driven by neoliberalism but dressed in the language of social justice. Through the following statement it can be seen that social justice aims are positioned as inferior to the development of human capital:

The central purpose of this Government, as set out in our overarching National Performance Framework is to: create a more successful country with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. (Scottish Government 2016a, pg. 2)

Within this statement 'opportunities for all' and 'success' become the providence of economic development. By coupling 'success' and 'opportunity' with economic growth, they become entangled and interdependent. Success is tied to the economy and the success of the economy is dependent on the development of adequate human capital. The knotting of education and human capital is further reinforced

within the National Improvement Framework as is demonstrated through a range of statements on page 2 such as 'right range of skills, qualifications and achievements that allow them to succeed' and a commitment to all children to develop the skills for 'learning, life and work'.

Similar binaries can be found within Curriculum for Excellence policy documents which highlight tension between 'education for human capital' and social justice drivers. In Building the Curriculum 4 (2009), a rationale for Curriculum for Excellence is set out which demonstrates a governing rationality that disseminates market values and metrics to every sphere of life and thus constitutes the human itself as 'homo economicus' (Brown 2015, pg. 176). It states:

'Curriculum for Excellence is designed to transform education in Scotland, leading to better outcomes for all children and young people. It does this by providing them with the knowledge, skills and attributes they need to thrive in a modern society and economy laying the foundation for the development of skills throughout an individual's life. Providing individuals with skills helps each individual to fulfil their social and intellectual potential and benefits the wider Scottish economy' (Building the Curriculum 4 2009, pg. 9).

The striking features of this statement is that the development of skills is presented as not only the benefit for the individual but also the wider Scottish economy. There are clearly tensions with the statement between its economic and social justice drivers. While there is an aim to allow children to 'thrive' within a 'modern society' this is linked to an economic output. Similarly, there is an aim for children to fulfil their 'social and intellectual potential' but there is a paradox as it closes by stating 'and benefits the wider Scottish economy'. This statement at the end moves it from being about the growth of individuals for their own personal benefit to being about wider economic outputs, the human becomes valued in terms of their capital worth.

Wendy Brown (2015) argues that neoliberalism formulates everything everywhere in terms of capital investment and appreciation, including humans themselves. Indeed, the above statement constructs humans ultimately as human capital for the wider economy with a requirement to develop skills which in turn unleash social and intellectual potential for economic benefit. This resonates with Peck and Tickell's (2002) assertion that neoliberal globalisation promotes and normalises a growth (economic) first approach, condemning social welfare aims. While the policy context may be seen as attempting to reconcile these competing agendas by folding them together, critical analysis by a number of commentators would suggest otherwise (see Grimandi 2012 for discussion). It has been argued that what is currently seen is neither a coexistence nor a combination but rather a subjugation of the commitment to social justice and inclusive education by the neoliberal discourse (Lingard and Mills 2007).

Disconcertingly, the policy context outlined above has been defined as 'highly competitive' with education being the prerequisite to all and any kinds of employment (Tomlinson 2012). Furthermore, the policy technologies employed are designed to produce a subject suited to making a contribution to the economy. Discourses of standardisation and performativity frame educational success in terms of achievement and under-achievement (Ball 2003, Grimandi 2012). This is in tension with the drive towards inclusive education which is underpinned by social justice.

1.7.2 Additional Support for Learning and the Enduring Presence of Deficit Language

The Education (Additional Support for Learning) (Scotland) Act 2004 amended 2009 is a key piece of legislation as it replaced the previous term of Special Educational Needs and with Additional Support Needs. This is significant because, inclusive education was primarily focused on children and young people with Special Educational Needs (Ainscow et al. 2006) but this expanded the criteria for inclusion. Such a shift is important for the context of this study as it increased the number of categories thus potentially increasing the number of children who could receive support. Scottish policy makers believe that the expansion of the additional support

needs system is welcomed because it indicates that more children are having their needs met (Riddell and Weedon 2016). This positions the policy as neutral but by drawing on Tomlinson's (2012) critique of what she describes as the rise SEN industry, the increased categorisation found in the policy deserves closer attention. Through the widening of those included, the policy can be read as one through which identified groups are differentiated and judged (Scott 2002, pg. 26).

Anita Ho (2004) working within the field of intellectual disabilities has suggested that labels can be used by school officials and legislators to adopt a medical model of learners and ignore other problems in the educational and social systems.

Consequently, labels can lead to exclusion through the way in which they provide an explanation for outsider behaviours and thus legitimize our responses to them. To combat this, Rix (2006) proposes that labels need to move from a tool of oppression to become a tool of facilitation. Avramidis et al. (2000) argues, multiple interpretations of labels occur when teachers attribute different characteristics to a label based on their experience which could be positive or negative. This idea is further expanded by Ryan (2009) who found that the nature and type of the disability can influence teachers' attitudes towards inclusion thus concluding that labelling impacts on how a teacher approaches a child on the Autism Spectrum. Further concerns are highlighted by Goodley (2014) who suggests that there is a current obsession with labelling needs and difficulty and cynically proposes that within 20 years, everyone will have a label.

Watson (2009) argues that there is a prevalence of deficit-oriented language in Scottish inclusion policy. The use of the term 'support' provides the necessary scaffolding to make good this deficit (Watson 2009, pg. 162). Allan (2007) contends that despite promises from Her Majesty's Inspectorate of Education that 'special educational needs will be a thing of the past', during the formation of The Education (Additional Support for Learning) (Scotland) Act 2004, she highlighted that there is a continued dominance of deficit language. For her, inclusion continues to be about a discrete population of children who require special help.

Despite the increase in children identified as being on the Autism Spectrum, the number of special schools has been reduced significantly down from 163 in 2010 to 141 in 2016 (Scottish Government 2016b). While there has been a significant reduction in special schools, the number of units within mainstream schools has 'mushroomed' (Riddell 2009). Consequently, 93% of all children in Scottish schools now spend all of their time in mainstream. This coupled with the reduction of Additional Support Needs Specialist staff, Educational Psychology and other specialists has resulted in challenges around providing a truly inclusive education in Scotland (Education Skills Committee 2017).

1.7.3 How the Policy of Mainstreaming appears to be Playing Out in Scotland

In an Article titled 'Scottish Classrooms are in Chaos' published in the Scotsman on 3rd February 2018, Shan Ross provides a chilling account of the reality faced in schools due to the policy of mainstreaming. The article draws upon the perspectives of teachers and representatives of teacher unions who highlight serious concerns, including increasing teacher stress levels, a dilution in the quality of teaching provided due to the challenges of meeting multiple support needs and a lack of both funding and resourcing to fully support inclusive education. The article does not just highlight the impact on the adults working within this system but also all of the children inclusive of those with and without ASN.

The article blames a lack of 'adequate funding' for the current position and draws on the opinion of Seamus Searson, General Secretary of the Teacher's Association who accuses the Scottish Government of 'penny pinching' suggesting that inclusive education is a way to save money. The children and Young People's Commissioner, Tom Baillie reminds us that 'In Scotland we have progressive legislation but it has not always been fully implemented for a number of reasons including lack of resources' (Baillie in Freeman 2016).

Only a few years after the passing of the *Standard in Scotland's Schools etc. Act* 2000, it was recognised that for inclusion to work, there would have to be adequate

funding. In 2005, the then SNP Education Spokeswoman, Fiona Hyslop recognised the importance of adequate funded (Hyslop 2005). Yet, 13 years on from this report and this article is highlighting that funding and resourcing have reduced the concepts of 'inclusion' and 'mainstreaming' to nothing more than rhetoric, a 'symbolic policy' (Rizvi and Lingard 2010, pg. 8). This lack of resourcing has once again been brought into sharp focus by Jan Savage, director at ENABLE, Scotland's largest charity. She draws on her organisation's report #includED in the Main to argue 'that the policy of mainstream was designed to deliver inclusion – it hasn't.' She goes on:

52% of pupils who have a learning disability telling us they do not feel they are getting the right support at school, and 78% of education staff saying there is not enough additional support for learning staff in their schools (Savage in Freeman 2016).

The Education and Skills Committee report issued to the Scottish Parliament on 15th May 2017 brought to the fore similar concerns to those raised above (Education Skills Committee 2017). The report captured the online views of 143 parents and 64 teachers. It documented the impact that a lack of resources was having and the ways in which this eroded the inclusive policy outcomes it was aiming for. It highlighted that 'due to a lack of resources, some children feel more excluded in a mainstream setting than if they were in a special school'. The purpose of this paper was to look at how Additional Support for Learning was working in practice. This report is useful because the discussion goes beyond the challenges of inclusion for children with additional support needs and looks specifically at the current impact of mainstreaming on children on the Autism Spectrum within a Scottish context.

The report contended that based on current mainstream resources, more children than are actually 'best served' by mainstream education are currently educated in this environment. Through a combination of limited resources and a large increase in the recorded incidence of additional support need, the pressure on Scottish

education has increased dramatically. The concerns are highlighted in teacher comments captured in the report:

The situation is extremely concerning in schools across Scotland right now. Inclusion sounds great and looks great on paper. The reality is that there are nowhere near the number of ASN staff – fully trained teachers as well as support assistants – to meet the needs of pupils who have a diversity of support needs. Pupils suffer from missing out and, in the end, they do not experience inclusion at all. The bottom line is that we need the situation to be addressed openly and honestly. We need teachers to be trained properly as specialists in all areas; we need more staff; we need resources.

(Geraldine Moore, Teacher)

While significant concerns were highlighted, there were also some success stories shared within the report that provide hope. Some parents have highlighted that the attitude of school staff was key the successes experienced. The views shared would suggest that this has not only benefited their child but has also been beneficial to the wider school environment having a positive impact on appreciating difference and tolerance.

Despite the review capturing the views of a variety of parents, it was those with children on the Autism Spectrum that challenged the notion of mainstreaming most. From the 143 responses, 55 were challenges from parents of children on the Autism Spectrum. The report highlights the pressure that children on the Autism Spectrum are putting on mainstream and also raises concerns about the ways in which Autism can be perceived socially by children and parents as 'the problem'. The evidence presented led the authors to argue that some of the disruptive behaviours experienced in schools is a direct result of being in an educational setting where children receive insufficient support due to a lack of resources. The perceived challenges presented in this report echo Slee (2001) where the goal of equity is equated to the allocation of additional resources to the disabled student. Although

these discussions raise a number of concerns regarding the quality of experience for children on the Autism Spectrum, there is a direct absence of the voices of the children and young people.

1.8 Approaches to Autism and Challenging Behaviour

A key challenge to the inclusion of children on the Autism Spectrum identified in the Education and Skills Committee report discussed above was the perceived behavioural challenges that this group presented with (Education Skills Committee 2017). Although challenging behaviour is not part of the diagnostic criteria for Autism, problem behaviour is recognised as a key feature (Nions et al. 2017). The term 'challenging behaviour' is frequently used to describe behaviour which may include self-injury, absconding, aggression, property damage and inappropriate social conduct. Furthermore, challenging behaviour is often associated with extreme irritability which may include anger, frustration, distress, meltdowns and persistent non-compliance with everyday demands (ibid). Challenging behaviour is more severe in individuals with Autism than compared to those who are typically developing or who are identified as having intellectual disability (Eisenhower et al. 2005).

Challenging behaviours are frequently identified as a priority for intervention due to the impact they have on the child (O'Reilly et al. 2010). Whilst it is agreed across all schools of thought that challenging behaviour is undesirable, there is a divergence between ways in which behaviour is understood and supported within each of the models. Mapped out below is an overview of four schools of thought that inform how challenging behaviour is approached. The summary below explores behaviourism, cognitivist approaches, Functionalist Communication Training (FCT) and current developments within Critical Autism Studies (CAS) that draw on the construct of 'neurodiversity'.

1.8.1 Behaviourism

The field of Autism is heavily influenced by behaviourism and within this school of thought the starting point for understanding Autism is from a 'deficit' perspective. Through a series of discrete interventions, the behaviours that are seen to be in 'deficit' can be corrected (Zurcher 2012). The behaviourist lens that is applied to Autism can be situated within the work of Lovaas (1987) who promoted an approach called Applied Behaviour Analysis (ABA). ABA is the breaking down of skills into small tasks in a highly structured way to reinforce positive behaviour whilst discouraging behaviour that is deemed inappropriate (NHS 2014). Within this school of thought, the goal is to make the child on the Autism Spectrum conform to social norms making them indistinguishable from their peers. At its core is the use of negative reinforcement which results in the child experiencing a negative response when their behaviour is inconsistent with the socially defined norms. In early ABA models the responses to behaviour out with the social ordering often-included punishment which had significant ethical implications. Earlier approaches to ABA have undergone a significant revision as a result (Milton 2014) but its behaviourist ideals have been retained and repackaged in many of the modern variations.

ABA and behaviourist approaches have been contested for the last 30 years by autistic scholars and activists due to the injustices it brings against children on the Autism Spectrum and the normalising aims and intensity inherent within its methods (Douglas et al. 2019). These approaches fail to live up to their promise despite ABA and its associated interventions being touted as miracle treatments for Autism (Milton 2014). Maurice (1994) in the book, 'Let me Hear your Voice: a family triumph over autism' argues that ABA saved her children's lives and likened it to the power of chemotherapy for cancer. Unfortunately, due to the rigidity of the delivery of ABA interventions, Zurcher (2012) has argued that there is a lack of flexibility due to the firm belief held by practitioners that its scientifically based methodology that will provides positive outcomes. Furthermore, Kupferstein's (2018) study links ABA with Post-traumatic Stress Syndrome, identifying in the long term that 86% of people who had been subject to ABA met the criteria in comparison to those who had not. Further concerns were raised by Lubbock (2011) who identified that practitioners delivering the programme could not pull on imagine solutions when the problem they were faced with was out with the boundaries of the programme.

1.8.2 Cognitivist Approaches

The cognitive revolution in psychology has resulted in there being a similar move within education. This school of thought is influenced by the work of Piaget (1896-1980) and Bruner (1915-2016) and largely emerged as a response to behaviourism (Milton 2014). A key component of approaches that draw on this line of thinking is that they value the centrality of measuring the functioning of the individual against normative stages of development. This has directly influenced understandings of Autism and as a result, a number of interventions have been derived from this line of thinking. Current behavioural interventions within this field are centred upon Cognitive Behaviour Therapy (CBT). The National Institute for Health and Care Excellence (2012) recommended that people on the Autism Spectrum should be offered age-appropriate, psycho-social interventions for comorbid mental health problems and to treat the core symptoms of Autism. CBT is identified as an intervention that is consistent with this recommendation (ibid)

Cognitive behaviour interventions are considered as a family of interventions for the general population (Hoffman et al. 2013). Due to the variety of forms they have taken in practice, approaches have been adapted for use with children on the Autism Spectrum. CBT approaches have been broadly utilised as interventions for anxiety and to bring about changes in the core symptoms of Autism. Such variations have been reported to bring about improvements for targeted children on the Autism Spectrum. Bauminger (2007) designed a study with CBT ecological intervention at its core. They reported that this led to improvements in companionships, social interaction problem solving and Theory of Mind through the observation scale they employed. Similarly, Wood et al. (2009) focused their study on children on the Autism Spectrum and additional anxiety disorder. The authors in this study reported improvements in social communication and emotional regulation which was maintained at their follow up three months later.

Van Sleensel and Bogels et al. (2015) explored the effectiveness of CBT for anxiety disorders in children on the Autism Spectrum (mean age 11.76 years old). This group was compared with children exhibiting anxiety disorders who did not have a diagnosis of Autism. Through the comparisons made between both groups, it was reported by authors that CBT intervention resulted in improvements in both groups. However, the improvements for children on the Autism Spectrum was less significant than their neuro-typical peers. In a more recent study by Swain et al. (2019), the power of CBT was explored for 18 younger children on the Autism Spectrum aged 5-7. A developmentally group adapted CBT approach was taken. The authors identified that the intervention had positive outcomes for anger/anxiety in those who were responders to the treatment. CBT was identified as having potential to be a useful intervention for children on the Autism Spectrum from as young as 5 years old.

1.8.3 Functionalist Communication Training

Within some schools of thought, there is a connection between deficits in communication and the display of challenging behaviour by children on the Autism Spectrum. Chiang (2008) conducted empirical research to investigate challenging behaviour for children on the Autism Spectrum who had limited verbal language. Of the 32 children who accessed this study, 16 of them met the criteria for challenging behaviour. In their conclusion, they argued that challenging behaviour was more likely to be displayed by children on the Autism Spectrum who had limited verbal communication. This is also echoed by Park et al. (2012) who focused their study on pre-school children on the Autism Spectrum aged 3-5. The authors highlighted that deficits in communication skills, in particular, receptive communication, had direct links to challenging behaviour.

Across literature and practice, Functional Communication Training (FCT) is often identified as a way of intervening to address challenging behaviour. FCT can be identified as having two components to it. Within the first stage, there is an assessment of the communicative function of the challenging behaviour through observation and discussions with key people around the child. When this information

has been ascertained, an intervention based on teaching the child an alternative response that results in the child accessing the same reinforcer maintaining the behaviour (Carr and Durand 1985). There are a range of communicative interventions that are often adopted by practitioners working within these models inclusive of but not limited to; unaided systems such traditional spoken language or signs (Frea et al. 2001), Structured Teaching (Schopler et al. 1995), Social Stories (Gray 2007) and The Incredible 5 Point Scale (Burton and Curtis 2012).

1.8.4 Communicative Interventions

Structured Teaching is an approach used as a form of social skills intervention. The principle behind this is intervention draws upon the visual strengths that are perceived to exist within the child on the Autism Spectrum. These strengths are used to counterbalance deficits in other areas such as auditory processing. Structured Teaching has the key aim of reducing problem behaviour whilst increasing adaptive independent functioning (Schopler et al. 1995). Within this intervention, there is a focus on 4 key areas namely physical organisation, schedules, individual work systems and task organisation (ibid).

Social Stories is an often-used approach within schools and was an intervention tool being used by all schools in this study. This approach was developed as a way of mediating child friendly interaction by Carol Gray (2007). The aim of this approach is to identify the social behaviour that are in deficit and through the use of a story, reframe the behaviour in a way that is both personalised to the child and in language that the child understands. Consequently, consideration has to be given to the child's current language skills to ensure that they understand what is being taught through the story. This intervention is seen to reduce challenging behaviour through the reteaching of a more socially appropriate alternative.

Burton and Curtis (2012) created a variety of 5 point-scales for use by practitioners and children. The scales are differentiated to support individuals across the Autism Spectrum with the aim to teach social and emotional skills in a concrete and systematic way. They identify that children who have deficits in social thinking or emotional regulation often exhibit challenging behaviour, particularly when faced with difficult social situations (pg.1). Within this model, it is recognised that individuals who lack the necessary skills to successfully negotiate social situations, fail repeatedly within these contexts. By selecting the correct 5-point scale from the toolkit, this intervention is identified to reduce challenging behaviour through guiding the child to selecting a more socially appropriate choice.

These functionalist approaches aim to remediate the embodied differences in learning and behaviour (Douglas et al. 2019). Yergeau (2018) argues that within a culture that is focused on the cure of Autism, normalising interventions are seen as the only hope to recover an autistic child's potential humanity and future. Such a construction of AS can be situated within the behaviourist, cognitivist and FCT models outlined above. Within these models, the scientific method is held to provide an 'auxiliary' modification that is later mobilised to further individualise and 'fix' this otherwise unstable or elusive object 'the autistic child' (Murphy and Done 2014). An alternative way of understanding the behaviour of children on the Autism Spectrum can be found on models of thinking which draw upon the construction of neurodiversity.

1.8.5 Neurodiversity Framings

Milton (2014) outlines the concept of neurodiversity suggesting that variations in neurological development are part of natural diversity. This is in contrast to more medicalised understandings of neurological development which are characterised by deviation from statistical or idealised norms of behaviour. Neurodiversity can be situated within a social model of disability, recognising both difference and the challenges that people on the Autism Spectrum face in their daily lives. Milton (2014) goes onto argue that this understanding of autism holds little value beyond disciplines of sociology and critical disability studies.

Similarly, O'Dell et al. (2016) highlight that dominant constructions of Autism are largely (but not exclusively) located within a neurobiological frame which includes the thinking inherent in the behaviourist and cognitivists approaches discussed above. As a way of resisting this, the authors point to the quickly developing field of 'Critical Autism Studies (CAS)' as a way of resisting and moving towards a way of working that respects neurological difference. The term 'CAS' was coined by Davidson and Orsini (2010) following a workshop in Canada. Davidson and Orsini also co-edited a book in 2013 titled 'Worlds of Autism: Across the autism spectrum of neurological difference. The authors suggest that CAS should advance new, enabling narratives of autism which resist deficit framings which influence policy and also argue for a commitment to developing new analytic frameworks that use inclusive and non-reductionist methodologies.

1.9 A Policed Group

Following the review of literature and the policy context, children on the Autism Spectrum can be seen as a 'policed' group. Taking Ranciére's (1999) concept of policed/political, it can be identified that children on the Autism Spectrum are a group who have been excluded and silenced, they are simply accounted for within the police order but have limited agency. For Rancière, the police order is all inclusive and encompasses groups that may not necessarily have a place within political decision making e.g. children, immigrants and slaves. It separates and excludes on one hand while allowing participation on the other. It goes beyond simple counting and categorisation as it encompasses all groups 'without remainder and without exclusion' (Ranciére 1999, pg. 29). It is not just a way of counting social groups but it does so in a manner that excludes any supplement to that order – it captures all in its gaze. A police order is not just an abstract order of powers (or laws or principles) it is 'an order or bodies' that define the allocation of ways of doing, ways of being, and ways of saying. These bodies are assigned by name to a particular place and task, it is an order of the visible and sayable (ibid). The police order is hierarchical and implicitly built upon the assumptions of inequality – this inequality is based on the very difference that legitimate the domination with the social order. All children,

including those on the Autism Spectrum are caught up in such a regime and are subject to the hierarchical forces of institutions and policy.

Using Ranciére's model, children on the Autism Spectrum are captured in the wider police order and due to the lack of tools for accessing their voices, they are often 'invisible'. This lack has resulted in them being excluded within the current research and as a result, their voices are missing from existing research. In addition, the voices of key stakeholders such as parents, teachers and TAs are rarely presented with the voices of children on the Autism Spectrum. While the police order is always there, politics is something that only occurs from time to time in very particular situations. The concept of politics is therefore an activity that requires action and only through this action can the subject come into being. This research is therefore political in nature as it sets out to challenge the way things currently are. To take forward this politically driven research, work that is of an emancipatory nature is required. This research will be split into two parts.

The first part of this research will be about developing a framework for working with and facilitating the genuine participation of children on the Autism Spectrum. In Chapter 2, a political response to the current educational discourses will be articulated. Through exploration of current research, it has been highlighted that research including children on the Autism Spectrum is dominated by traditional methods that are not adequate for the job in hand. It therefore acknowledges and responds to Bruno Latour's (2004) assertion that critical research has become 'like mechanical toys that endlessly make the same gesture when everything around them has changed'. The gestures in question are the ongoing commitment to traditional research methods and the limitations of these gestures.

To develop research that is emancipatory, this thesis uses the work of Ranciére (1991) as a theoretical resource to critically questions traditional constructions of emancipation. This research provides a critique of Ranciére's work and moves beyond it, offering a new 'gesture' that opens-up a fresh way of looking at

emancipatory research. In turn, this creates an alternative way to look critically at how research is approached for children on the Autism Spectrum and provides a starting point for developing methods in chapter 3 to challenge this unjust position.

The second part of this research focuses on developing methods for analysing and reading the data produced in a way that is also emancipatory. To do this, a framework for both reading and analysing the data utilising the work of philosophers Gilles Deleuze and Michel Foucault will be drawn on to challenge the discourses that emerge. By drawing on these philosophers, not only will the framework for doing the research have emancipatory potential but also the reading of the data will equally open-up new ways of being, saying and doing (Ranciére 1999). The aims and objectives 1-3 presented below are for the first half of this research and covers chapters 1, 2 and 3. The aim for the second half of this research is shown in aim and objective 4.

1.10 Aims and Objectives

Part 1

This first section of this research sets out to establish both a framework and ways of working with children on the Autism Spectrum and the key stakeholders surrounding them.

Objective 1 (part 1)

To establish a framework for research that is critical, experimental and ethical.

Objective 2 (part 1)

To identify and create a set of research methods that allow for the genuine participation of children on the Autism Spectrum.

Objective 3 (part 1)

Through an empirical study, to investigate the barriers to an equitable approach through observing practice in multiple sites and eliciting the views of teachers, pupils, their parents and support staff.

Objective 4 (part 2)

To establish a framework for analysing the data produced in section 3.

Objective 5 (part 3)

To re-read the data explicated in chapter 4 and read this in a way that enables a rupture in the current discourses.

Chapter 2: Thinking Through Emancipatory Research with Jacques Ranciére

'Whoever teaches without emancipating stultifies'

Jacques Ranciére

2.1 Introduction

This chapter sets out an educational argument which will invoke thinking around a new and distinctively educational account of research for children on the Autism Spectrum (l'Anson and Jasper 2017). The approach taken will stimulate thinking in a way which is critical, ethical and experimental with new opportunities identified in an educational field that is narrowed by neoliberalism and a body of research bound to rationalist approaches. To stimulate thinking, this research draws on the work of French Philosopher Jacques Ranciére (1991) and uses his distinct construction of emancipation to challenge current approaches to emancipatory research in the field of Autism. Although Ranciére (1991) provides a useful theoretical tool to critically question traditional constructions of emancipation, a critique of his work ruptures current thinking and opens a space for an emancipatory approach to research founded upon social justice. This research therefore moves beyond Ranciére (1991) and the chapter proceeds by arguing for research driven by social justice underpinned by participation, recognition and a critical understanding of communication and its implications for how this research will be approached.

This research has emancipatory intent and the critical questioning of traditional emancipatory logics is drawn directly from Ranciére's (1991) Ignorant Schoolmaster. The position offered by Ranciére is powerful because it provides scope for a critical reading of current emancipatory traditions and therefore opens-up a space to reimagine and rethink how emancipatory research is approached. Firstly, this chapter starts by exploring the context of emancipation within modern educational thought. Secondly, Friere's (1970) Pedagogy of the Oppressed is analysed, where the author attempts to break from the dominant approaches to emancipatory education found in modern emancipatory thought (Galloway 2012). Thirdly, the

emancipatory educational thinking located within poststructuralist approaches is identified and discussed. Finally, an alternative to current logic is proposed through critical questioning of the current terrain offered by Jacque Ranciére's (1991) Ignorant Schoolmaster. It is argued that to truly connect with research that focuses on children on the Autism Spectrum, there has to be significant revision of the centrality of speech within all models including Ranciére's key concept for emancipatory critique 'equality of intelligences'. It is argued that in keeping with his wider philosophical position that aims to be inclusive of 'anyone and everyone' (Ranciére 2010), a shift from 'speech' to a wider construction of 'communication' is required. This requires moving beyond the position offered by Ranciére (1991).

Taking up the potential offered by this shift in thinking, it is argued that to do emancipatory research that is inclusive of children on the Autism Spectrum, then a social justice lens is required that is driven by equality as axiomatic. A social justice framework that promotes participation, recognition and a clear articulation of communication in response to the narrow framing of speech offered by Ranciére (1991) is provided. The social justice framing addresses the gaps identified in current emancipatory logic and offers an alternative way to think about emancipatory research. Consequently, through the lens of social justice, an alternative emancipatory approach to education can be articulated that is doable, democratic and radical (Magnusson 2014).

2.2 Logics of Emancipation

2.2.1 Logics of Emancipation in Modern Educational Thought

Biesta (2008) outlines the logic of emancipation that is situated in modern education which he locates within the Enlightenment and places Kant at its core. While the idea of emancipation has a tradition dating back centuries, a decisive step was taken in the 18h Century when emancipation became wedded to Enlightenment ideals (ibid). Emmanuel Kant in his 18th Century essay titled 'What is Enlightenment?' makes the argument that the process of enlightenment is linked to becoming an

independent or autonomous being. It is argued that an individual can only achieve independence or autonomy based on their own ability to use reason. In the often-quoted passage of the essay he states: 'Enlightenment is man's release from his self-incurred tutelage. Tutelage is a man's inability to make use of his understanding without direction from another' (Kant 1991). For Kant, the process of enlightenment can only be achieved through education. It is the process of education that develops mature minds from immature ones. Education is seen as the means for human progression from the stage of immaturity to maturity. By developing into a rational and mature being, freedom and autonomy can be achieved (Biesta and Bingham 2010, pg. 28). Kant argues that 'you should learn to grab hold of your own life, to become the subject of your own life rather than subjected to others' (Kant 1991).

Kant proposes that to become enlightened one needs to be able to reason independently and conversely. 'Immaturity is man's inability to make use of his understanding without direction from another' (Kant 1991). However, De Boever (2011) highlights the paradox of this statement; he suggests that despite Kant's obedience clause that reason should be self-directed without support from another. The problem is that in accepting this simulative statement, Kant has 'told us so' (De Boever, pg. 46). The way out of Kant's critique, according to De Boever, is to apply Kant's critique to himself where one becomes the active subject of his text rather than the passive one. He argues that this might have been the revolutionary core of Kant's text all along as it invites the reader to undermine the very conditions it sets (ibid). Within Kant's model of enlightenment, the master has a pivotal role in leading the subject from an immature to a mature mind thus acquiring independent reasoning. It is only through this guidance from the master that the subject of Kant's text can be emancipated.

Biesta (2008) highlights that modern emancipation moved forward on two broadly related lines following the work of Kant – one educational and one philosophical. Following the work of Jean-Jacques Rousseau, many educationalists at the end of the 19th Century and start of the 20th Century supported a very individualised view of childhood. In this configuration, a choice for the child could only mean a choice

against society. The idea that education was about emancipation supported the development of education as a discipline but had catastrophic consequences across Europe. It became agonisingly clear that this approach could be adopted by any ideological system including Nazism and fascism.

Consequently, following World War Two, educationalists began to argue that emancipation could not take place without wider transformations in society. Biesta (2008) goes on to argue that it is against this backdrop that there was a proliferation in the use of critical pedagogies with a focus on the analysis of oppressive structures within society. He further highlights that following in the footsteps of a Marxist tradition, emancipation became centred on power with the key idea that emancipation could only be brought about if people gain an insight into the hidden power relations. Ideology also becomes core to this construction of emancipation with the influence of Fredrich Engles' notion of false consciousness playing a significant role (Eagleton 1997). For emancipation to be achieved, someone out with, not subjected to the workings of power needs to provide us with an account of our objective condition. On this reading, therefore emancipation can only take place with external intervention.

2.2.2 Logics of Emancipatory Education in Paulo Freire

Paulo Freire in his book Pedagogy of the Oppressed (1970) makes a significant contribution to emancipatory education in that he attempts to break from a Kantian tradition of Enlightenment thinking, where, as we have seen above, the purpose of education is to create rational and autonomous individuals who can think and act independently (Galloway 2012). Freire's construction of emancipation is based upon a critique of the oppressive nature of what he calls 'the banking model' of education. Similar to the discussion above, the master/student relationship is pivotal in the critique he provides.

In Freire's (1970) banking model of education, the oppressors are the teachers that have subjectivity whereas the students are positioned as objects regulated by the teacher who controls the knowledge that enters into their consciousness. Education is reduced to an act of depositing with the teacher as the depositor and the students as the depositories. The teacher leads the student to memorise *mechanically* narrated content thus reducing them to *containers* that are merely to be filled by the teacher. A teacher's skill is judged by how well she fills the container with knowledge whilst the student is judged by how passive they are during the process of being filled with knowledge. Banking education inflects people's conscious engagement with the world, making them dependent on knowledge transmission from the teacher and less able to engage in dialogue with others independently.

From this model, Freire (1970) takes on the project of outlining an emancipatory approach to education in an attempt to overcome the false or naïve consciousness of the oppressed without introducing external liberators that come from outside to emancipate. This is an attempt to break from traditional models of emancipation within critical theory underpinned by Marxist thought. To support this move, Freire draws on Buber's dialogical humanism (1958) that centres dialogue as a method of liberation from dominating relations, transforming subject-object relations to dialogue based on the mutual exchange of co-subjects. This move allows Freire to open-up the possibility for emancipatory relations based on love, trust and hope which are interlinked to praxis.

Freire (1970) suggests a two-stage model for the emancipation of the oppressed. Firstly, through praxis, the oppressed commit themselves to the transformation of oppression. Secondly, once the reality of oppression has been transformed, this pedagogy ceases to belong to the oppressed and it becomes the pedagogy of all people in the process of liberation. This moves the relationship away from teacher as the oppressor to one centred on a relationship based on dialogical humanism. The role of the teacher in this reconfigured relationship is to re-instigate dialogical and reflective practices, which, in turn, reinstate praxis and link people back to the world. However, this move has limitations and does not quite solve the problem it is

intended to (Galloway 2012). It has the potential to limit this relationship between teacher and student to one where they are merely working cooperatively, if this is so then the teacher becomes the facilitator and emancipation is reduced to learning only (Biesta 2004 in Galloway 2012).

The potential for Freire's intervention to be reduced to learning only is problematic and results in Freire's move simply being another turn in the same circle (Ranciére 2009). Biesta and Leary (2012) point out that learning is an individualising term as it is something that one can only do for oneself; it is not possible to learn for someone else. Due to the individualising nature of the term learning, Biesta and Leary argue that the attention is diverted away from relationships and instead the spotlight remains focused on the individual. Freire's intention was to emancipate but by reducing this to learning, he instead potentially stultifies and reduces the possibility for freedom.

2.2.3 Logics of Emancipation in Post-Structuralism

Connections can be made between Foucault's (1977) knotting of power and knowledge and emancipatory education (Biesta 2008). Biesta (2008) outlines the way in which the approach to power and knowledge offered by Foucault (1977) has significant implications for emancipation. In Enlightenment thinking, it was seen that for true knowledge to be found, power relations would have to be suspended and victory could only be achieved with a victory of knowledge over power. Knowledge and power were seen as separate entities that could be separated with pure knowledge recognised as being uncontaminated by the workings of power. In contrast, Foucault (1977) argued that this tradition should be abandoned presenting a case that knowledge and power are not separate but bound together. Knowledge for Foucault is therefore always contaminated by power and cannot retain the 'innocence' found within Enlightenment thinking.

Unlike the logics of emancipation found in modern educational thought discussed above, Foucault's (1977) theory should not be understood as a contribution to

demystification and is therefore not an avenue for overcoming the workings of power (Biesta 1998). Consequently, Biesta (2008) argues that Foucault's knotting of power and knowledge has the potential to trap us in an 'iron cage' with no escape. In contrast to the Enlightenment model, there is no possibility to step outside of power structures and therefore a paralysing effect is achieved. Foucault (1977) forces us to rethink knowledge and instead of trying to locate it outside or beyond power we have to move beyond this inside-outside thinking.

Foucault's solution to this is what he defines as 'eventualization'. The approach he takes is that instead of seeking to explain singular events with historical constraints, anthropological traits, or an obviousness which imposes uniformity on all, he moves in a different direction. Instead, he proposes that 'eventualization' works by constructing around a singular event a 'polyhedron' of intelligibility, the number of who's faces are not given in advance and can never properly be taken as finite (Foucault 2003). Foucauldian analysis therefore does not result in a deeper or truer understanding of how power works – it only tries to unsettle what is taken for granted. It does not aim to produce a recipe for action.

Drawing on this logic Ranciére (2009, pg. 45) argues that this creates issues within current thinking because it leads us to a position whereby 'there is allegedly no longer any solid reality to counter-post the reign of appearances' but despite this framing, the concepts and procedures of the critical tradition still function well, precisely in the discourses of those who proclaim their extinction (ibid). To illustrate his point, he draws upon philosopher Peter Sloterdijk (2004) who puts forward an argument inviting us to liberate ourselves from the content of the critical tradition. However, Ranciére (2009) argues that the content of his argument remains trapped in the logic of the critical tradition that he is trying to break from. The logic put forward by Sloterdijk (2014) tells us that we are victims of comprehensive structures of illusion, victims of ignorance and resistant to an irresistible total process of development of productive forces (ibid). The tactics used by Sloterdijk are consistent with those employed in traditional critical theory and he makes visible the hidden machines at work. This amounts to reading in a reverse way, the same equation that he is trying to free us

from. Ranciére (2009) argues that the earlier critical processes were intended to arouse awareness and energies for emancipation, yet these more recent oppositional processes while they may have an emancipatory intent, are either disconnected from this project of emancipation or are working directly against it. The denied yet recycled critical logic is ultimately conservative (Chambers 2013).

2.2.4 Ranciére's Radical Alternative Logic

Ranciére's (1991) Ignorant Schoolmaster offers us a radical alternative to the logics of emancipation outlined above. He does this through the re-telling of the story of 19th Century pedagogue Joseph Jacotot. The critical questioning that it provides allows us to find an alternative starting point for emancipatory research as it questions the relationship between master and student and through application of similar logic, researcher and research subject. It provides a contrast to all other logics and advocates a shift that takes a model of equality as the starting point between the master and student. This is significant as previous models have a deficit at their core whereas Ranciére (1991) provides us with the possibility to think otherwise through his critique of explicatory teaching models. He proposes that we start with the presupposition of equality and imagine what can be done as a result of this axiomatic leap. This is a powerful assertion as it moves equality from a gap to be closed to something that is a given. Table 1 below provides an overview of each tradition and the emancipatory logic it employs, this clearly illustrates the distinctiveness of each.

Logics of Emancipation	
Emancipatory Tradition	Emancipatory Logic
Kantian Emancipatory Logic	Master has knowledge and frees the
	subject through imparting knowledge
	and supporting the move from
	immaturity to maturity.
Critical Theory Emancipatory Logic	Master emancipates through the
	demystification of power.

Freire's Emancipatory Logic	Teacher is the oppressor and the shift
	Freire proposes is a move towards
	relationships based on dialogical
	humanism and solidarity.
Foucault's Emancipatory Logic	Power and knowledge knotted are
	together and inequality is therefore
	something that cannot be avoided.
Ranciére's Emancipatory Logic	Relationship based on equality. Theory
	of 'equality of intelligences' at its core.
	Equality is axiomatic.

Table 1. Logics of Emancipation

Ranciére (1991) recounts the story of Joseph Jacotot, a teacher who, as a result of the French Revolution was exiled. He found himself in the unusual position of teaching Flemish students at the University of Louvain who knew no French and similarly, he knew no Flemish. The only common link between himself and the students was a bilingual edition of Telémaque that had been published in Brussels. Through a translator, he asked the students to read the first half of the book with the aid of the translation then he asked them to read the other half of the book in French and only write about it in French. Jacotot was astounded by the results, the students were able to express themselves well in French and he had managed to educate them without teaching them anything.

This discovery is highly significant not because of the end results for the students but because it challenged Jacotot's understanding of the role of the teacher. In traditional pedagogical models, the teacher's role is to 'explicate', that is to transmit knowledge to unknowing and ignorant minds (Ranciére in Bingham and Biesta 2010, pg. 4). Ranciére highlights that the problem with the explication model is that the teacher makes a series of reasonings to explain a series of reasonings and this serves to enforce an inequality between master and student (ibid). The student is always at the mercy of inequality as it is that very gap that the master is trying to

close, equality is something that is not in the present but the future and consequently not attainable at all. It becomes trapped in the circle of inequality never to escape (Ranciére 2009, pg. 45). In this model, it is assumed that the child is unable to learn on their own, learning can only take place when supported by a master explicator. However, as Ranciére points out, prior to entering formal education, young children can learn perfectly well on their own and cites the example of how children develop their mother tongue without explication (Ranciére 1991). Yet, when they are put into formal schooling, this seems to be forgotten and they enter into a relationship based on inequality, one where only the master has the power to cast light on the darkness of ignorance.

Ranciére (1991) provides us with a critique of the Socratic model to demonstrate inequality between master and student. He does this through a reading of Socrates' teaching of Meno's slave found in Plato's writings. Parallels have also been drawn between this critique and the relationship between master and student found in Kant. Given the similar role that the master plays within both Socrates' and Kant's texts, a number of commentators such as Stiegler (2010) and De Boever (2011) argue that this critique is also directly charged at Kant. Ranciére (1991) argues that the Socratic Method is the perfect form of *stultification*. He points out that in this method, the learned master's science makes it very difficult for him to spoil the method. The master knows the response and leads the student to it through his questions. A good master is skilled at discretely guiding the student's intelligence, it is done in a way that is discrete enough to make it work but not to the point of leaving itself. This relationship is illustrated through Ranciére's reading of Socrates' interrogations Meno's slave:

'Through his interrogations, Socrates leads Meno's slave to recognize the mathematical truths that lie within himself. This may be the path to learning, but it is in no way a path to emancipation. On the contrary, Socrates must take the slave by his hand so that the latter can find what is inside himself. The demonstration of his knowledge is just as much the demonstration of his powerlessness: he will never walk by himself, unless it is to illustrate the master's lesson. In this case, Socrates interrogates a slave who is destined to remain one.' (Ranciére 1991, pg. 29)

As can be seen in this relationship, the path to learning lies within the subject himself and it is the job of the master to 'explicate' and guide the slave to find this. However, this relationship is an unequal one as he is never able to free himself from the shackles of the master. The master's demonstration of knowledge is also a demonstration of the student's (slave's) deficit and powerlessness – the student is reliant on the master. As De Boever (2011) highlights, Ranciére does away with the master position at the heart of the Socratic Method. In his new configuration, everyone becomes the subject of her or his own education, philosophy and emancipation rather than being passively subjected to education, philosophy and emancipation. As a result, Ranciére is able to use Joseph Jacotot to interrupt the student master relationship and provide an alternative reading.

2.2.5 Logics of Emancipation as Equality of Intelligences

The discovery made by Jacotot allowed him to re-think the notion of teacher as 'explicator' and therefore the underpinning relationship between master and student. Jacotot had discovered that by leaving his intelligence out of the picture, he had provided space for his student to use their own intelligence to grapple with the tasks he set around the Telémaque book. The students were able to learn quite well without his intelligence as a mediator. This contrasted with what he thought would happen, he expected 'horrendous barbarisms' and 'a complete inability to perform' (Ranciére 1991, pg. 3). However, to his surprise, he found something to the contrary, the students performed the task as well as many French students could have done (ibid). Consequently, as a result of his intellectual adventure, his change in approach enables a shift in the relationship between master and student, from one of unequal intelligences, that is the knowledgeable master and the ignorant student, to one based on an 'equality of intelligences'.

A model of intelligence based on an 'equality of intelligences' is an important step because it moves it from something that is embedded in the framework of the human being such as within liberalist models (see Chambers 2013 for discussion) to one where equality is something that is axiomatic, something that is both verified and demonstrated in action. There are no stages to equality, 'equality is a complete act or nothing at all' (Ranciére in Bingham and Biesta 2010, pg. 9). Ranciére argues that 'equality of intelligence' is an equality of 'anybody and everybody'. It cuts across race, class and disability excluding no one. Equality is not a characteristic of individuals under certain conditions, it is an assumption that applies to 'anyone at all'. It is based upon the 'mad presupposition' that anyone is as intelligent as anyone else (Ranciére 2010, pg. 2). Despite its seductive appeal, there are a number of issues that have to be worked through for its full potential to be realised.

Myers (2016) brings our attention to Todd May's (2010) reading of Ranciére (1991) who argues that when he invokes' equality of intelligence' of human beings, he does so with a 'minimalist' conception in mind. May suggests that this is less about intellect and more about the ability to engage in the project of 'reflective construction of lives'. Myers (2016) sees this as problematic because such a construction of intelligence centres it as a property or capacity that renders humans equal. In her view, this tactically excludes those who cannot reflectively construct their own lives or participate in speech. Indeed, the centrality of speech is tied to Rancérian 'equality of intelligence' and it appears to presuppose relationships between rational beings centred on speech. This critique of Ranciére (1991) would suggest that he has simply shifted the Kantian notion of rationality to that of reflection. In relation to language acquisition of young children, he writes:

We speak to them and we speak around them. They hear and retain, imitate and repeat, make mistakes and correct themselves, succeed by chance and begin again methodically, and, at too young an age for explicators to begin instructing them, they are almost all—regardless of gender, social condition, and skin color—able to understand and speak the language of their parents. (Ranciére 1991, pg. 5).

The above quotation illustrates the way in which speech and the rational approach to understanding is at the heart of the Rancérian subject. Through the way in which it

values speech as the core of language and speech as central to understanding, speech can be identified as pivotal in the 'equality of intelligence'. Myers (2016) argues that Ranciére remains committed to the liberalist tradition he claims to have parted with by taking equality as axiomatic due to the way in which he posits human equality as being based on 'reason'. Consequently, she argues this denies full personhood and/or community membership to those with cognitive disabilities or mental illness. However, despite this charge, the quotation above allows us the openings to address the problem that has been identified. Ranciére recognises that not everyone is able to understand and speak the language of their parents as 'they are almost all' able to 'understand and speak the language of their parents' yet he still goes on to claim that his 'equality of intelligences' is for 'anyone and everyone' (Ranciére 2010).

If equality is truly for 'anyone and everyone' then we can move forward on the premise that there is a value on 'diversity' rather than 'deficit' as there appears to be an intention for everyone to be included. This shift from 'equality of intelligences' to 'diversity' is helpful because it allows emancipatory potential to emerge by opening up the possibility to look beyond speech as the central factor in emancipation. Woods (2017) argues that diversity is about respect for difference with there being a value placed on individual differences rather than seeing these differences as barriers to participation. Adams and Bell (2016) see diversity as wedded to the category of social justice as without truly valuing diversity, the issues of injustice cannot be effectively addressed. Given that it is rare to hear the experiences of learners on the Autism Spectrum (Milton 2013), the category of speech inherent in Ranciére's framework requires to be extended and the broader notion of 'communication' taken up. This can be achieved by looking at the broad category of communication which acknowledges a wider range of methods than the narrow focus on speech alone (Tissot and Evans 2003). A broadening of communicative categories allows the potential for greater range of participation within this research. Consequently, through a focus on social justice, an emancipatory agenda can be taken forward based on diversity, participation and communication. Whilst Ranciére (1991) has provided a useful theoretical resource through which to interrogate

traditions of emancipatory education, this research now moves forward in a way that addresses the theoretical void found within his rational construction of the child.

2.3 Towards Social Justice based Emancipatory Research

In realising the challenge identified through the reading of the emancipatory terrain, a social justice lens can be identified as the way in which to move forward in this research. It is recognised that valuing diversity and celebrating difference is central and social justice-based research is the best way to achieve this. Despite the prominence of social justice-based approaches across a number of contexts, there is little clarity of its meaning (Boylan and Woolsey 2015). It is therefore essential that a clear definition of social justice is set out for this research and a clear articulation of the role it plays established. This research recognises social justice as both a goal and a process (Adams and Bell 2016), and identifies three main components to achieving social justice goals. Firstly, it takes up social justice as a matter of participation and by drawing upon the work of McNeilly et al. (2015), it explores the disconnect between the policy and practice. Secondly, it explores the concept of 'recognition' by drawing on the work of Woods (2017) who argues that there needs to be a revision of the social model of disability for individuals on the Autism Spectrum. Finally, it sets out an argument articulating a move from speech and voice to a wider term of communication. This lays the foundations for the methods utilised in chapter three and provides the base from which children on the Autism Spectrum can both participate and be recognised.

2.4 Social Justice

Social Justice is a contested term and its realization arises from meeting of a particular kind of authority with political aspirations and activism located in particular historical circumstances (Rizvi and Lingard 2010, pg. 157). It is a term that regularly appears across the educational terrain but due to the absence of a clear definition, it has become nothing more than a 'catchphrase', failing to offer an explanation of its social, cultural and political significance (North 2006). This study parallels the

starting point taken by McNeilly et al. (2015) who take forward social justice as a matter of participation. This starting point is critical for this study as it is driven by the injustice within current educational policy and research that has resulted in children on the Autism Spectrum being marginalised. Despite an international policy context which celebrates and promotes the right of the child to have their voice heard, the voices of children with disabilities including those on the Autism Spectrum are silenced. The international policy context makes explicit that children including those with disabilities have the right to express freely on all matters affecting them, and for their views to be given due weight in accordance with their maturity. This right is at the core of the UN Convention on the Rights of the Child (1989) and The United Nations Convention on the Rights of Persons with Disabilities (2006). The state parties who have been involved in ratification have a responsibility to ensure that these rights are realised.

2.5 Social Justice as Participation

McNeilly et al. (2015) argue that the starting point for social justice is participation. This starting point is critical for this study as it is driven by injustices within the current educational policy and research context that has resulted in children on the Autism Spectrum being marginalised. As Milton (2013) highlights, it is rare to hear the experiences of learners on the Autism Spectrum, yet this is in spite of a policy context that suggests otherwise. Both the national and international policy contexts celebrate and make explicit the importance of child's voice making explicit that all children, including those with disabilities should be afforded the right to express freely on all matters affecting them, and for their views to be given due weight in accordance with their maturity. This right is at the core of the UN convention on the Rights of the Child (1989) and The United National Convention on the Rights of Persons with Disabilities (2006). The state parties who have been involved in the ratification have a responsibility to ensure that these rights are realised. However, as Byrne and Kelly (2015) argue, children with disabilities have traditionally been excluded from these rights for three reasons. Firstly, they are perceived to have no views to express; secondly, it is assumed that their views will be better articulated by adult caregivers; finally, a concern that attempts to ascertain their views will be either too difficult, expensive or impossible to elicit.

Despite the growth of participatory approaches that advocate the involvement of children in research, this shift that developed out of the New Sociology of Childhood (James and Prout 1997) has been subject to much criticism in the literature. Before embarking upon participatory research, it is important to draw out these criticisms and explore how to move on in a way that addresses them yet allows for meaningful participation. The limitations of participatory research have been well versed with Roberts (2007) arguing that it cannot be taken for granted that more listening will equate to more hearing. Participatory research cannot escape the dominance of adult driven agendas and therefore the use of voice is simply reduced to another tool in the adult armoury of research with voice becoming a rhetorical means to serve adults. Additionally, despite well intended researchers, the approaches adopted can result in them being infantized and therefore treated as immature. Consequently, by treating them as immature we are reinforcing the incompetence that the research was designed to usurp in the first place (Alderson 2007).

While participatory research is often designed to address the power differential between adults and children, a very simplistic transactional view of power is employed. This is where the researcher sees themselves as having power and then through participatory research gives some of that power to the subjects in their study. As a result, some researchers have fallen into the trap of viewing participatory research with children as a 'fool proof technology' for carrying out ethically sound research with children. Gilles and Robinson (2010) argue that such approaches can lead to approaches which employ tokenistic rhetoric and leads to over-inflated claims. Ultimately, even the most concertedly child-centred approach is ultimately led by an adult research agenda (Gallagher 2008). Gallacher and Gallagher (2008) draw on Foucault's concept of power and its knotting with knowledge to critique participatory approaches. From this perspective, governmental power depends on knowledge of the population being governed. Consequently, research on, or even with children, is linked to adult anxieties about

children and how to improve them. By participating in creating knowledge about themselves, children are taking part in the processes used to regulate them.

Participatory research with children has often been charged with falling short of making any real difference in decisions that are made around children and young people. Tisdall and Davis (2004) in their review of projects where participatory approaches had been adopted, concluded that children being consulted and having their views acknowledged had limited power to make any real impact. This resonates with Kirby (2002) who evaluated 27 participatory projects and illustrated that the projects had little impact on public decision making despite positive outcomes at a personal level. Similarly, Badham (2004) highlights the failure of neighbourhood renewal projects that require the participation of local communities, it is often the case that participation is tokenistic and bolted on rather than being placed at the centre. Furthermore, Waller and Bitou (2011) argued that the explosion of participatory methods should not be taken forward uncritically. Tools and methods themselves are not enough to enable participation and engagement.

Despite the challenges identified in adopting participatory approaches with children, including those with disabilities, there is much potential that has yet to be mined. By working closely with children on the Autism Spectrum, there is potential to bring about political and social transformations as well as improve the quality of their lives and that of their families (Aldridge 2015). Participatory research that actively involves children can be a radical means of interrupting the dominant discourses and begin to address some of the existing silences (Groundwater-Smith et al. 2015). Children on the Autism Spectrum have unique insights to offer about specific aspects of their childhood and without these insights, a distorted and unrepresentative picture is presented which can and does have implications for how they are treated (Aldridge 2015). This research adopts a similar position to Wickenden and Kembhari-Tam (2014) and recognises that all children, regardless of their disability have something to communicate and therefore should be provided with the opportunity to actively participate in research. For children on the Autism Spectrum,

participation in this research is a leap towards acknowledging and respecting their unique perspective on the world and respecting their diversity and difference.

2.6 Recognition of Diversity and Difference and Challenging Domination

It is important that now more than ever that a strong case for recognising and respecting diversity and difference is put forward. Woods (2017) highlights the current position for the Autism community and argues that they are not just marginalised within society but also within the wider framework of disability studies. He argues that the current policy frameworks have been favourable to those with physical and sensory disabilities whilst those with neurodevelopmental differences such as those found in autism have been side-lined. This sits in contrast to the process for attaining social justice which should be democratic and participatory, respectful of human diversity and acknowledge the diversity within social groups. Adams and Bell (2016) argue that diversity and social justice are inextricably bound together. They state that without truly valuing diversity then we cannot effectively address issues of injustice. Equally, without addressing issues of injustice we cannot truly value diversity.

Woods (2017) in his critique of how the social model of disability works for the autism community, puts forward a strong case arguing that the autism community have been marginalised within disability studies and policy. He argues that the current policy framework does not fully recognise those on the Autism Spectrum and instead favours those who have physical and sensory disabilities. Consequently, it can be argued that the medical model is the dominant model within autism studies (Graby 2016). The failure to acknowledge the challenges that children on the Autism Spectrum face has catastrophic consequences and it is commonly reported that parents struggle to gain adequate support in schools for their Autistic children which often results severe psychological distress (Woods 2017). Beardon (2008) highlights the injustices to individuals on the Autism Spectrum as a result of the huge energy demands of trying to meet the predominant demands of a neurotypical world.

In response to wider debates within disability studies calling for a re-invigoration of the social model of disability (Oliver 2013 and Levitt 2017), Richard Woods (2017) argues that individuals on the Autism Spectrum have not benefited from the social disability movement and outlines a range of things to move to what he defines as 'emancipation'. Woods (2017) suggests that society needs to recognise each person on the Autism Spectrum as an 'expert' on their own Autism. Such a move is important as it values the individual on the Autism Spectrum and the unique perspective that they have on the world. Furthermore, he suggests that individuals on the Autism Spectrum need greater control over their lives. This he argues would reduce mental health issues caused by individuals trying to adapt to predominant societal demands. Consequently, he revisits the roots of the social model of disability and reminds us that the social model has always been to take the focus away from the individual impairment and shift the gaze towards societal structures. He calls for a revision of institutional policy and practice to better respond to the challenges faced by those on the Autism Spectrum. Furthermore, he suggests a move away from the 'toxic' language used in debates around Autism and suggests that we re-think 'disorder' and 'deficit'. This can be achieved by exploring constructions of equality that are axiomatic and to do this communication must be seen as central to the human subject.

2.7 Communication

By presupposing equality as axiomatic (Chambers 2013), it can be considered how the power differential between adult researchers and child research subjects may be addressed. In relational models that value the 'equality of speaking' beings those who do not have speech as their preferred method of communication are automatically excluded (Vincent 2016). Children are potentially more vulnerable to unequal power relationships with the adult researcher than other groups (Einarsdottir 2007). It can be difficult to remove or reduce the unequal power relations between adult researchers and children and therefore consideration has to be given to the methodologies and methods that are employed (Stafford 2017). To address this power imbalance, a critical assessment of the dominance of speech and voice within the policy context provides a launchpad for asserting a more just communication.

The policy context and research literature is dominated by the term 'child's voice' and this is often presented as a way to address social justice by arguing that the child has a right to be heard. At national level, such an agenda can be seen within A Guide to Getting it Right for Every Child (GIRFEC) (Scottish Government 2008) where it echoes wider uses of the term 'voice' within the UN Convention on the Rights of the Child (1989) and highlights a commitment to 'child's voice'. This can be seen through statements such as 'to be given a voice in the decisions that affect their wellbeing' and 'they have been listened to carefully and their wishes have been heard and understood' (Scottish Government 2008). The notion of 'hearing' and 'listening to voices' can be seen as the driving force behind the 'new sociology of childhood' (Prout and James 1997). The assumptions made about 'voice' and 'hearing voices' are synonymous with privileged norms with regard to human beings. This is problematic at two levels; firstly, the term voice assumes an interaction that encompasses a narrow view of the characteristics of human beings interacting with one another, secondly, the notion of 'giving voice' as presented in GIRFEC is problematic and is a term that appears regularly across the terrain (Ashby 2011). It will be argued that the term 'voice' is a privileged term and the notion of giving voice will also be problematised.

The Autism Toolbox defines 'voice' as 'any method that allows a child or young person to be actively involved in the decision-making process, regardless of the form it takes' (Scottish Government 2012). While the direction this statement is moving in is useful, the very use of the term 'voice' is problematic because 'voice' is a component of speech and brings to the forefront a conception of rational communicative beings. Despite the sentiment to broaden the category of 'voice' to any method, the narrow definition linking voice to speech positions the human within a narrow set of criteria. Voice can be understood as an 'ableist' term with Chouinard (1997) defining ableism as the ideas practices, institutions and social relations that assume able bodiedness, and in doing so construct people with disabilities as marginalised and largely invisible to others. Campbell (2009) argues that ableist thinking has led to the reproduced idea of the typical self and body that personifies a

human being. More recently, Stafford (2017) extends the concept of ableism to think about children with more complex communication needs and suggests that ableist assumptions are made about children's capacity to have a say on matters that affect their lives. Indeed, the widespread use of the term 'voice' may contribute to this due to the value it both explicitly and implicitly places on certain methods of communication.

This research explicitly recognises the issues with 'giving voice' and therefore seeks to identify the problem with this position. It recognises the problems identified by Ashby (2011) that hierarchies of power and privilege are reinforced when a researcher has the power to give voice. She argues that by giving a person a voice we assume that someone is required to bring their experiences to light and therefore it is assumed that they have no voice of their own. To be given a voice sets up an inequality between those giving voice and those receiving it, it is a relationship between those who know and those who do not. This serves to confirm the inequality of those receiving voice, a deficit position from which they can never really escape (Ranciére in Biesta and Bingham 2010, pg. 3).

To address the power differentials identified above in both the use of the terms 'speech' and 'voice' and the issues brought about by giving voice, an expansion of our boundaries is required. A more just approach is available by moving to a system where the value of knowledge is based on speech to one where communication (Tissot and Evans 2003) is prominent. By broadening the category from speech to communication, it immediately allows for greater participation, opening-up much greater possibilities. Stafford (2017) reminds us that all children have communication; it is just expressed in a variety of different ways. Tissot and Evans (2003) identify the importance of the term communication for understanding the different ways in which children on the Autism Spectrum communicate. They state that it is important to recognise that although a child may not be using spoken language or even augmentative supports, this does not mean they are not communicating. Layton and Watson's (1995) construction of communication is useful as states that communication is the ability to let someone know your needs

and desires, verbally or non-verbally. Indeed, this shift is important because it allows us to move away from the narrow constraints of verbal communication which permeate across all the logics of emancipation outlined above. Similar thinking comes through in the Scottish Government Publication, The Autism Toolbox (2012) as it states that children on the Autism Spectrum 'may require modified or creative methods of communication'. This creative potential fits with the experimental nature of this methodology and therefore calls for flexibility in method development that responds to the participants in this study.

Through the broadening of this category, the previous category of speech and voice is expanded for individuals on the Autism Spectrum to communicate who would otherwise remain 'silenced' (Bogdan and Biklen 1998). The shift allows greater potential for children on the Autism Spectrum to be recognised as legitimate participants in their own right and widens the scope for the range and types of methods and methodologies that can empower their genuine involvement in research (Stafford 2017).

2.8 Conclusion

This chapter started by taking Ranciére's (1991) construction of emancipation found within the Ignorant Schoolmaster. Ranciére's text was used as a theoretical resource to critically question dominant constructions of emancipation and to provide an opening to re-think how emancipatory research might be approached for children on the Autism Spectrum. Through the use of the critical questioning provided by Ranciére, it was argued that emancipation based on equality as an axiomatic concept was well placed to guide emancipatory thinking. However, this chapter suggested a break from these lines of tradition by challenging the rational construction of the child found within Ranciére's work and based on this argued for a move away from traditional notions of 'speech and 'voice'. Whilst engagement with Ranciére (1991) provided a theoretical resource through which to interrogate traditional understandings of emancipatory education, this research breaks from

Rancière (1991) and moves forward within a social justice framing that is beyond his rational construction of the child.

It was argued that research based on social justice, with value placed value on 'diversity' rather than 'equality of intelligence' was the best starting point for emancipatory research. Consequently, this chapter argues the case for emancipatory research driven by social justice underpinned by 'participation' and 'diversity'. These principles are identified as pivotal in shaping how research may be approached with children on the Autism Spectrum.

Chapter 3: Designing and Doing Research Inclusive of Children on the Autism Spectrum

'Education begins the moment we see children as innately wise and capable beings.

Only then can we play along in their world'

Vincent Gowman

3.1 Introduction

This chapter sets out to develop a set of research methods that will allow children on the Autism Spectrum, attending mainstream Scottish primary schools, to share their experiences. Children on the Autism Spectrum have often been excluded from research studies due to their perceived deficits in social communication, social interaction and social imagination (Kirby 2015). The first half of this chapter takes on these terms and situates them within dominant discourses that circulate around education, often used to support teachers and school staff in understanding children on the Autism Spectrum. It is argued that these discourses are situated within ableist framing of Autism and contribute to the deficit understandings that have excluded children on the Autism Spectrum from research. To counter this, there is a re-reading of how Autism is understood and constructed by drawing on literature from Critical Autism Studies (CAS).

The second half of this chapter outlines the case for adopting a multi-method qualitative approach to this research in order to meet the aim of equality of communication. Drawing on existing communication research within the field of Autism, it is argued that approaches which are centred on visual communication provide the best entry point and lead to a Visual Narrative approach being adopted. Additionally, a case for a supplementary diary-based approach is also argued for and this allows us over time to potentially capture critical events that would have otherwise been missed (Barbour 2009). Attention is paid to the communicative strategies required for children on the Autism Spectrum to successfully participate and engage in this activity. Finally, a range of additional methods for gathering

information are articulated including the use of field notes and traditional semistructured interviews to capture views of other key stakeholders.

3.2 Prevalent Constructions of Autism

Prevalent constructions of Autism are centred upon a set of diagnostic criteria that portray specific difficulties as residing within the individual. Individuals on the Autism Spectrum are defined through what is generally known as a 'triad of impairments' with associated difficulties in social communication, social interaction and social imagination (Wing and Gould 1979). The triad of impairments is dominant within the field of Autism and can be seen in the most common frameworks for diagnosis further information can be found in Wing's (1996) book *The Autistic Spectrum*. Definition and diagnosis of Autism is bound up in this triad with its influence seen within the American Psychological Society's Diagnostic and Statistical Manual of Mental Disorders which portrays individuals as having perceived difficulties in social communication and social interaction across multiple contexts with restricted, repetitive patterns of behaviour, interests or activities (APA 2013). Such a portrayal of the individual is also seen within the core reference materials available to teachers and other professionals. Within the Scottish context of this study, the key reference guide available for teachers 'The Autism Toolbox' (Scottish Government 2012) takes up such an understanding of Autism and the terms social communication, social interaction, social imagination' are all situated under the banner of 'Understanding Autism'. It is important to outline what these terms generally mean as they are core components of how Autism is understood within the Scottish Education. The summaries provided below have been drawn from the Autism Toolbox, however, very similar constructions of Autism can be found in most textbooks within the field of Autism (see Attwood 1998, 2008 and Happé 1995, 2019).

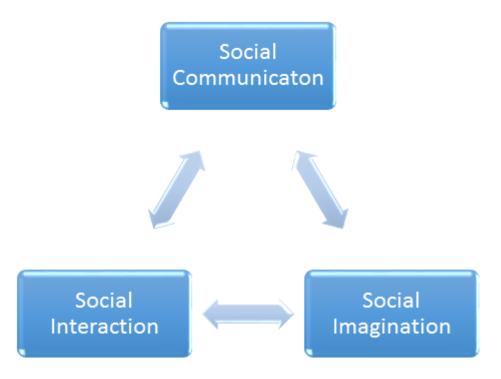


Figure 1. Triad of Impairments.

3.2.1 Triad of Impairments

Social Communication

According to the 'Autism Toolbox' (Scottish Government 2012) all children on the Autism Spectrum have deficits in social communication but these present differently for each individual. Children with 'high-functioning' Autism are often articulate and present as having good language skills but their ability to understand language within a social context is impaired. They may talk excessively about a special interest but have difficult starting and maintaining conversations on other topics.

Equally, while some children demonstrate strong verbal skills, many others are non-verbal or have limited verbal language. The degree of impairment varies vastly depending on the individual. Listening to and processing verbal instructions can be a challenge with some children taking longer to respond within an expected timeframe. Language may be interpreted literally e.g. 'pull your socks up' would literally be translated as the child having to pull up their socks as opposed to the child having to work harder. Additionally, this also leads to children on the Autism

Spectrum having challenges around understanding inference and deduction during language tasks.

Social Interaction

For some children on the Autism Spectrum, social interaction can be a significant challenge. At the heart of this are challenges around understanding social etiquette and social boundaries. The innate drive for social contact that most individuals have is fraught with complexity for children on the Autism Spectrum. This can lead to a number of problems and challenges around understanding non-verbal social rules and cues can lead to difficulties in relation to proximity, eye contact a superficial understanding of friendships. For children on the Autism Spectrum, there are challenges making and maintaining friendships. Due to a lack of awareness around relationships, children on the Autism Spectrum may be overly passive or overly dominant in social situations. Both extremes may result in social isolation.

Social Imagination

Social imagination or flexible thinking as it is sometimes known is an individual's resistance to change or an instance on 'sameness'. Consequently, some children on the Autism Spectrum may find new routines or events challenging. This may result in some children having difficulties transitioning from one activity to the next or one place to another. Additionally, many children on the Autism Spectrum can find taking on the perspective of another person difficult and therefore may be unable to understand or predict the feelings or the possible reactions that another person may exhibit in response to their communication. While some children on the Autism Spectrum have excellent memories, they often find it challenging to use this in a contextually appropriate way. Furthermore, children on the Autism Spectrum may have difficulties with 'executive functioning'. Executive functioning is often associated with difficulties in self organisation such as planning, time-management and completing routine daily tasks.

Children on the Autism Spectrum are often thought to have limited skills in creative and imaginative play. Some give the impression of imaginative play but through

careful observation it is often the case that they are replaying something that they have seen before. Children on the Autism Spectrum may present with obsessive and repetitive behaviour patterns and a pre-occupation with their special interest can potentially impact on social functioning. While special interests can potentially be used to motivate a child on the Autism Spectrum, these interests can be all consuming and may place significant stress on other people in the child's life.

3.2.2 Autism and Communication

The dominant construction of Autism outlined above situates communication and language within a 'deficit' framing. This echoes the assertion by Graby (2016) that the Autism discourse is dominated by concepts of it being a disorder and a deficit. Indeed, the definitions provided above were all centred on what the child lacked in terms of their communication and produces a static notion of Autism that limited individuals to a single set of pre-defined characteristics. To develop alternative understandings of Autism, a challenge to the current medicalised constructions of it has to be mounted. There needs to be a shift away from deficit constructions of communication to provide an alternative narrative to medicalised understandings that portray Autism in relation to a set of characteristics e.g. atypical speech as a sign of incompetence that can be reduced to the underlying pathology of an individual (Lindblom and Karna 2017). The work of Richard Woods (2017) is key in this challenge as he argues that there needs to be a change in the Autism discourse to take on positive connotations of autism by moving away from toxic words and debates like 'disorder' and 'deficit'. As highlighted above, these constructions of 'disorder' and 'deficit' are central in the diagnostic understanding of Autism and the language outlining the core difficulties associated with autism above (social communication, social interaction and social imagination) are constructed within such a framing.

3.2.3 Critique of the Medical Model of Autism

This medical model of Autism tends to position Autism as residing within individuals, constructing it as an underlying pathology in a body that fails to do things normally

(Bailey, Harris and Simpson 2015). This leads to the labelling of communicative deficits that restrict their interactions with the world. Difficulties are therefore synonymous with finding the 'right cure' and consequently a person's 'disability' could be eliminated if proper treatments were developed or available (Molloy and Vasil 2002). This amounts to a narrative where Autism is a 'personal tragedy' rather than looking for broader explanations such as Autism resulting from 'social oppression', or through a lack of environmental supports (Lindblom and Karna 2017).

In medically informed research, individuals diagnosed with Autism are examined against the 'norm' of those who are typically developing (ibid). Through this construction of Autism, competencies are measured against an idealised subject and deficits perceived if these ideals are not matched. Milton (2012) suggests that pathologising any characteristic or behaviour that deviates from this ideal norm leads to an 'atypical' construction of the individual. The judgment therefore becomes one that anything that individual on the Autism Spectrum does or does not do becomes an embodiment of their diagnosis (Goodley 2014). As a result, there are limitations set on the potential competencies of diagnosed individuals, as they rarely contribute to the dominant medical discourse.

To transgress this construction of Autism, an alternative way of thinking has to be constructed. As an alternative to a model of Autism where it is understood in terms of a communication deficit bound by a set of defined constructs that lead to prejudgment, it would be better to see communication as different rather than impaired and recognising its value during interactions with others (Lindblom and Karna 2017). If Autism is understood as a socially and culturally produced phenomena (Laurelut et al. 2016) it provides scope for recognising the communicative competence of children on the Autism Spectrum. This can be achieved by recognising the areas of communicative strength that reside within this community rather than focusing attention on what children on the Autism Spectrum cannot do. Visual communication strategies are often promoted for children on the Autism Spectrum and offer potential as a starting point for understanding their communicative potential.

3.2.4 Children on the Autism Spectrum as Visual Communicators

In seeking an appropriate starting point for working with children on the Autism Spectrum, existing research evidence points to visual communication as the best entry point as such approaches are most common within the field of Autism (Hume et al. 2014). Hodgdon (2011) proposed that the use of visual tools enhances a child on the Autism Spectrum's comprehension, participation and ultimately their expressive language. This can be seen in the autobiographical work of Temple Grandin (an adult on the Autism Spectrum) who shares her experiences of the world in her book, Thinking in Pictures (2006). Her book highlights the dominance of her visual understanding of the world whilst raising awareness of her challenges in processing and understanding verbal language. Additionally, it has been more broadly identified that some individuals on the Autism Spectrum have relative strength in visual detail processing and visual search skills (Hume et al. 2014). Although research has indicated that visual supports help to increase social interactions, improve skill development, and increase on task behaviours, the particular visual tools employed must meet the communicative requirements of each individual child (Fittipaldi-Wert 2007).

When the task of working with individuals who must compensate for limited expressive abilities is taken on, there are many variables to consider such as cognitive levels, physical abilities, communicative needs and also the communicative partner they will interact. In response, there are a number of visual communicative intervention tools that are used to support children on the Autism Spectrum to communicate expressively. Visual tools have been identified as supporting the comprehension and expressive language of children on the Autism Spectrum (Spears and Turner 2015 and Hodgdon 2011). Symbol based intervention systems such as PECS are often used to support the communication of children on the Autism Spectrum (Frost and Bondy 2005). Symbol based interventions tend to be favoured over sign language interventions for children on the Autism Spectrum due to the increased difficulty with motor pattern planning that many signs in sign language require (Spears and Turner 2015). Whilst visual interventions are

assumed to be for only non-verbal children, some verbal children do not prefer speech as their main method of communication (ibid).

3.3 Qualitative Methodology

The research takes on a qualitative design as it is concerned with developing an understanding of the experience of children on the Autism Spectrum. Due to the nature of what this research is trying to find out, qualitative methods are best suited to the job as they are better suited to working with small sample sizes where data does not lend itself to measurement or counting (Hammaberg 2016). It better lends itself to an in-depth understanding of a phenomena and is therefore appropriate for beginning to unpick the situations surrounding children on the Autism Spectrum. The study breaks from traditional qualitative research as it employs a multi-method approach. Multiple methods differ from mixed methods as the former uses more than one method but remains within a particular tradition e.g. qualitative research; whereas the latter requires data from both the qualitative and quantitative traditions.

Multi-method designs also provide scope for facilitating a multi-faceted understanding of the research phenomena. Richardson and St. Pierre (2005) argue that traditional approaches to understanding the validity of knowledge produced within qualitative research studies that employ the theoretical construct of triangulation fall short of capturing the complexity of the world. Instead they suggest a shift in metaphor with the recognition that knowledge produced when there is multiple methods is multi-faceted and the traditional metaphor of 'triangulation' is not quite up to the task. This research therefore takes up the alternative metaphor seeing knowledge production as more akin to a crystal than a triangle. Crystallization encompasses an 'infinite variety of shapes, substances, transmutations, multi-dimensionalities, and angles of approach' (ibid, pg. 963) thus providing a way of thinking about the influence of multiple data sources including the variations that exist within data sources e.g. video diaries and written diaries. This metaphor helps us to understand the complex nature of knowledge production and captures the multi-faceted nature of facilitating diverse communication needs and the context they are situated in.

3.4 Visual Research Methods

If visual communication is identified as a way that can support communication for children on the Autism Spectrum, then visual research methods offer a way of working that has inclusive potential. Visual methods are usually presented as a 'fool proof way' of ensuring 'child friendly' research (Gallacher and Gallagher 2008). In taking up visual methods, there is a requirement for critical application of my own communication at all stages as simply making the research visual does not automatically ensure equality of communication and participation. Consequently, this research does not focus on what is child 'friendly' or Autism 'friendly' but considers that knowledge is generated inter-subjectively through interactions and relationships. It is therefore that a visual approach will be taken to build trust and rapport between myself as researcher and the research participants. Furthermore, a flexible and a reflexive approach will be adopted and where required, changes made in response to individual communicative preferences.

As can be seen from the research which highlights the potential of existing communication tools for children on the Autism Spectrum, there is much to be harvested by adopted a research approach that is visual. It has been identified that pictures are better remembered than words regardless of age or intellectual functioning (Whitehouse et al. 2006). Spears and Turner (2015) argue that a world full of words is frequently too overwhelming for many children to comprehend and consequently those working with them employ visual strategies to provide a portal between worlds. There has been an explosion of visual and creative approaches adopted by researchers in an attempt to engage children as active agents in the gathering of research data thus doing research 'with' rather than to 'them' (Mannay 2015, pg. 22).

Adopting visual research methods can be seen as a way of making the familiar strange. Deleuze (2000) suggests that we can make the familiar strange by abandoning the constraints inherent in language and adopting the stance of a

nomadic thinker who is free to create new connections and open-up experience. By adopting the visual approach, a space for children on the Autism Spectrum to communicate about their world can be created thus enabling a step out of the dominant paradigm where assumptions are made about their world on their behalf. Stouffer et al. (2004) underlines the potential of stepping out of dominant paradigms and suggests that it opens up the possibility of critical and creative research to understand 'other'. Introducing a visual element to the data collection process can potentially bring to light different ways of knowing and understanding (Gauntlett 2007). Visual methods of data production have the potential to locate the researcher in the lifeworld and spaces of participants.

3.5 Ethical Awareness

Guillemin and Gillam (2004) highlight that reflexivity can be a useful ethical tool to think through ethical dilemmas that emerge during research practice. Reflexivity can be thought in terms of praxis, that is reflection in action (Cohen and Manion 2007) with awareness of one's own identity being identified as critical in carrying out ethically sound research (Basit 2013). Researchers have to accept that they are part of the social world that they study and an awareness of this will prompt them to be reflexive. Reflexivity entails reflection, introspection and a critical self-analysis employed throughout all stages of the research. Through understanding one's own identity, the researcher can positively influence the quality of the data gathered and the social world that is being portrayed thus increasing validity (Vernon 1997).

To be reflexive, researchers have to be self-aware and recognise the influence their own backgrounds and beliefs have on the research process. Hopkins (2008) reminds us that it is important to acknowledge the impact of our personal biases, backgrounds and beliefs on the research process. He argues that we propound realities and truth which can lead to our own distorted version of reality and truth. Researchers need to recognise their own biases at every stage of the investigation and constantly employ strategies to reduce them. Reflexivity should be practiced at all times according to Mosselson (2010) who contends that the researcher's

positionality as a tool can not only enhance the study, but also improve the research process, data analysis and the interpretation of data.

In carrying out this research it is important that I am explicit about my own position. I was aware that I came into the field of study with my own personal and professional biases. As a professional, I was in the privileged position as both a teacher (at the point of this study working specifically with children on the Autism Spectrum). Through this I had my own ideas from practice regarding the best way to work with children on the Autism Spectrum. In going into the field of study I was aware of the bias this may have introduced into my research work and worked to suspend this bias throughout. Furthermore, unlike many scholars working within the field of Autism, I myself am not on the Autism Spectrum but as a practitioner working within the field of Autism, I come at the study with a genuine attempt to understand the experiences of those on the Autism Spectrum.

3.6 Gaining Access

3.6.1 Context of Study

This research was carried out across two local authorities in Central Scotland during sessions 2012/2013 and 2013/2014. Due to the gap in the literature which identified that whilst the voices of children on the Autism Spectrum had been absent from research, younger children on the Autism Spectrum had been ignored.

Consequently, the sample here focused on children attending primary school. Furthermore, due to the wider policy context that is framed with the presumption of mainstreaming which is central to *The Standards in Scotland's Schools etc Act 2000* (2000), then a focus for developing the sample was to explore the experiences of children on the Autism Spectrum in Scottish mainstream Primary Schools.

3.6.2 Formal Access to Site of Research

Research often requires negotiation with multiple layers of gatekeepers at different stages of the research process (Coyne 2009). All researchers working with children have to negotiate a 'hierarchy of gatekeeping' (Hood et al. 1996). Initially,

permission was sough formally from the University of Stirling's Ethics Committee and this application was underpinned by the Revised Ethical Guidelines for Educational Research (BERA 2004) (see appendix 1). Although the University's Ethics Committee was a type of formal gatekeeper, I also had to also gain permission from other formal gatekeepers in each Local Education Authority (LEA) before I was able to approach schools. I took up different starting points for accessing the field of study in relation to each LEA. Firstly, I was an employee of LEA 1 which had its advantages when it came to getting access through formal gatekeepers. It also meant that within my LEA I was able to informally negotiate access with some gatekeepers giving me a 'head start' in some respects. In my own LEA the process was writing to the Director of Education to seek out permission to carry out the research. As no formal process for this was evident, I requested this through a letter with a copy of my proposal (appendix 2). Permission for this was granted and this enabled me to start formally approaching schools.

The process for access within LEA 2 was different. In this authority I was an 'outsider' but my entry point was another EdD student who was one of the Head Teachers within that authority. She had given me informal permission to access her school and there was a child that fitted the criteria for my sample in the school. I then wrote to the Director of Education of LEA 2 following a similar process to my own authority. In this instance, I was granted an agreement in principle but had to complete an additional form covering similar ethical ground that my application to the Ethics Committee at the University covered. The Director then wrote back to me granting me full permission.

Across both LEAs, The Head Teacher was the 'gatekeeper' in each school and was in control of access to the institution and its community members including the groups I was seeking access to – this included children, teachers, TAs and parents. In trying to gain access to schools, I created personalised letters addressed to each of the Head Teachers instead of creating a generic letter that was sent to all. I targeted schools in consultation with a colleague from Speech and Language Therapy who had an overview of the Autism population within the local authority. A

total of 12 schools were targeted across both LEAs (appendix 3). From the 12 targeted, I was only able to obtain access to 4, one of which I was employed within.

3.6.3 Sample Size

Children

The sample size consisted of 10 children all of whom were on the Autism Spectrum. These children were all in mainstream for at least 50% of the week with some of them accessing specialist bases within their mainstream context for a flexible portion of the time. This qualitative research places value on the uniqueness of the group created and takes the position that they only represent themselves (Cohen and Manion 2007). The sample size of ten is large enough to provide 'thick descriptions' but not so large that the data becomes overwhelming and it is difficult to make sense of it (Geertz 1973). The cases discussed while they may be able to provide some generalisations are mainly only intrinsic in their own value. Table 2 gives an overview of the schools and children participating in the study. The name of each child has been changed to a pseudonym to protect their identity.

In targeting a sample group of children on the Autism Spectrum careful consideration was given to ensuring that there was a mix of boys and girls. However, due to the very nature of Autism, there is an estimated ratio of 4 boys to every 1 girl. Attwood (2013) suggests that girls on the Autism Spectrum are more difficult to detect as they appear to have 'strong' social skills and in the early years are able to imitate social interactions which are often adequate enough to maintain friendships. However, as children become older, friendships become more complex. Consequently, many girls on the Autism Spectrum are not diagnosed until they have entered adolescence (Begeer et al. 2013). They also have fewer behavioural problems in comparison to their male counterparts, so less attention is brought to them (Andersson et al. 2013). As part of the targeting strategy discussed above, my colleagues from Speech and Language Therapy directed me to schools were girls on the Autism Spectrum were on the roll. Unfortunately, I was not able to gain access to this school and as a result only boys participated in this study.

Research Participants Children				
Local Authority	School	Child's Name	Child's Stage	
LEA 1	School 1 Mainstream school with specific AS Base attached. * denotes children participating but not attached to support Base.	David	P2 and P3	
		John	P3 and P4	
		Martin	P4 and P5*	
		James	P6 and P7*	
LEA 1	School 2 Mainstream school with Support Base attached. * denotes children participating but not attached to support Base.	Dominic	P3 and P4	
		Paul	P3 and P4	
		Ryan *	P2 and P3	
LEA 1	School 3 Mainstream School with Support Base attached. Both children placed in mainstream.	Michael	P4	
		Darren	P5	
LEA 2	School 4 Mainstream School with no Support Base	Callum	P7	
Total Number of Pupils	10 boys			

 Table 2. Overview of Research Participants Children

Stakeholders

This research also sought to gather the views of key stakeholders involved in the education of the sample group of children above. The sample included teachers, TAs and parents. The total size and scope of the sample was dictated by the team of adults involved with each child. There are variations in the number of adults within each of the children's teams due to differences in the support packages that had been allocated. Table 3 provides an overview of the sample illustrating the total number stakeholders available and those that were eventually interviewed.

A letter was issued to each stakeholder inviting them to participate in a semi-structured interview. Copies of the letters issued to each stakeholder can be found in appendices 8,9 and 10. I was able to obtain additional interviews from at least one stakeholder for each children (with the exception of Paul and Michael). Significantly, both Paul and Michael were placed full-time in mainstream and only had a teacher and one parent within their immediate team. This can be contrasted to David and John who were placed within a Support Base and who had a much larger team around them.

Overview of Adults in Team and Interviews Provided				
Name of Child	Adults in Team	Interviews Provided		
David	Class Teacher (Mainstream)	Class Teacher (Mainstream)		
	Class Teacher (Support Base)	Class Teacher (Support Base)		
	Teaching Assistant	Teaching Assistant		
	Mum	Mum		
John	Class Teacher (Mainstream)	Class Teacher (Mainstream)		
	Class Teacher (Support Base)	Class Teacher (Support Base)		
	Teaching Assistant	To a disconnection		
	Mum	Teaching Assistant		
		Mum		

Martin	Class Teacher (Mainstream)	Class Teacher (Mainstream)
	Mum	
James	Class Teacher (Mainstream)	Class Teacher (Mainstream)
	Mum and Dad	Mum and Dad
Dominic	Class Teacher (Mainstream)	Class Teacher (Mainstream)
	Class Teacher (Support Base)	Class Teacher (Support Base)
	Teaching Assistant	
	Mum and Dad	Teaching Assistant
	Wall alla Baa	Mum and Dad
Paul	Class Teacher (Mainstream)	No interviews provided
	Mum	
Ryan	Class Teacher (Mainstream)	Class Teacher (Support Base)
	Class Teacher (Support	
	Base)	Teaching Assistant
	Teaching Assistant	
	Mum and Dad	
Michael	Class Teacher (Mainstream)	No interviews provided
	Mum	
Darren	Class Teacher (Mainstream)	Class Teacher (Mainstream)
	Mum	
Callum	Class Teacher (Mainstream)	Class Teacher (Mainstream)
	Teaching Assistant	Teaching Assistant
	Mum	Mum

Table 3. Overview of Adults in Team and Interviews Provided

3.6.4 Communicating the Aims of the Study to the Children

In keeping with the ethical attention focused on communication, careful consideration was given regarding how the study was initially shared with the children. At the

outset of the study, an initial meeting with each group of children was arranged. The initial meeting consisted of sharing information about the research which aimed to provide an overview that was available in a clear and easily understood format (Lambert and Glacken 2011). As the existing research evidence suggests that children are better able to understand visual communication, a visual power-point presentation was created and shared with the children. Prior to sharing this, I met with the staff teams who supported each child and discussed the style and content of my presentation to ensure that consider how it may have been received by those who knew the children best. Careful consideration was given to the length, content and style of presentation taking on board comments from Alderson (1995) that it is important not to try to over or under explain as this might preclude a child from making an informed choice. The presentation was limited to 7 slides and children were given a hand-out, so they had a copy of this.

In addition to taking on comments from the staff teams, visual presentation was made taking into account the visual preferences highlighted in the literature for children on the Autism Spectrum (see Tissot and Evans 2003 and Mesibov et al. 2005). It was also considered that some children on the Autism Spectrum and other participants may have challenges around written language. The presentation therefore changed text colour for each bullet point to make it easier for the children to locate the point being made during the discussion. I also discussed the style and layout of the presentation with a Speech and Language Therapist and staff across two schools, making adjustments based on recommendations made.

A number of key ethical themes were covered in the presentation and took into consideration some of the things that Lambert and Glacken (2011) recommend sharing with children. To ensure that the presentation did not become overloaded with information and potentially put some children off (Alderson 1995), the initial presentation addressed only 4 key areas. Firstly, it outlined what the context of the research was. Secondly, it detailed the approach that would be taken and the time commitment required. Thirdly, it explained what would happen to their information and outlined procedures to ensure confidentiality. Finally, there was a consent sheet

slide which also double up as a consent form – children signed this to opt in and a copy was retained by both child and myself as the researcher (appendix 4). In addition to opting into the study, the children also indicated as part of their initial consent form their preferred diary recording method. The choices made by the children can be seen in the table below.

Preferred Choice of Diary Method				
Name of Child	Source of Evidence Notes			
David	Audio diary, field notes,			
	interviews			
John	Video diary, field notes,			
	interviews			
Martin	Typed diary, field notes,			
	interviews			
James	Written diary, field notes	Although James		
	and interviews	completed a diary, he		
		chose not to hand this		
		over at the end of the		
		study.		
Dominic	Written diary, field notes			
	and interviews			
Paul	Written diary, field notes			
	and interviews			
Ryan	Written diary, field notes			
	and interviews			
Michael	Written diary, field notes			
Darren	Written diary, field notes			
	and interviews			
Callum	Typed diary, field notes,			
	interviews			

Table 4. Preferred Choice of Diary Method

3.7 Ethical Considerations

3.7.1 The Ethics of Consent/Assent as Communication

In my initial meeting with each group of children, I shared a PowerPoint presentation with them. I provided an overview of the consent process and highlighted that although their parents had given permission for them to take part, this in itself was

not enough and I was seeking their approval. This was in line with Cuskelly (2005) suggestion that it is the researcher's responsibility to ensure that both parents and children understand that parent consent is not assumed to mean that children will participate. Child assent is also vitally important in this study due to the child-centred research methodology being utilised (Lambert and Glacken 2011). While the children opted into the study initially, this was not viewed as permanent agreement for their ongoing participation and therefore the principle of assent was adopted as an ethical check. As a researcher, I was mindful to ensure that opportunities for withdrawal were provided throughout.

The process adopted in this research is best defined as process assent (Alderson 2005). The process of assent involves the negotiation and renegotiation over the life of the research, constantly reviewing and providing opportunities for the children to opt in and out. This principle influenced all activities and interactions. Informed assent retains many of the key elements of informed consent including the requirement for the research subject to have appropriate and sufficient information to make an informed decision and involvement is voluntary with competence shown in the informed decision that is made (Dockett, Perry and Kearney 2012).

Formal consent on the behalf of children participating in this research was provided by their legal parents or guardian as the children were not of age to enter into a legal contract (Ford, Sankley and Crisp 2007). While consent was a sufficient legal basis for the children's participation in this research, the process of assent was also introduced to respect children's ability to make their own choice with regard to participation or non-participation. Assent acts as a supplement to the legal requirement of consent by a parent or guardian and respects the child's affirmation to participate (Lambert and Glacken 2011). Similar to the process of formal consent, assent can be seen as an ongoing process with the decision to participate or not revoked at any time (Cocks 2007).

Given the potential complexity of this research for the children participating, it was recognised that they may be limited in personal experience to fully understand the potential implications of the methods employed (Mishna, Antle and Regehr 2004). As the research employed data collection methods that were to an extent experimental, there were potential ethical challenges that children may not have anticipated (ibid). As Woodhead and Faulkner (2000) point out, children and adults may have different frames of reference to what causes discomfort and harm and this has implications for children's assent to participate in research.

Consequently, I was sensitive to non-verbal communication and viewed this as central to the assent process. Lambert and Glacken (2011) suggest that the researcher should pay attention to things such as posture, eye contact and facial expressions. The ethical attention this requires is vital because it has been found that regardless of age, children's belief that the researcher would be unhappy if they withdrew from the research possibly prevented children withdrawing from the study (Ondrusek et al. 1998). This dimension is even more critical for some children on the Autism Spectrum because they may have a stronger desire to adhere to the rules (Attwood 2008) set and may therefore forge ahead with participation in order to please the adult. Furthermore, some children may communicate verbally that they are okay to participate but their body language conflicts with this.

3.8 Methods

Research Questions

The research methods were set up to investigate the questions positioned below in relation to children and other key stakeholders including Teachers, TAs and Parents. For children, questions were centred on understanding their experience, how these experiences varied across space and time as well as their relationships with others. The focus for stakeholders was centred on their understanding and role within inclusion in relation to their link child within the study. I was also interested in the discourses across the educational network for each child and how these shaped the

child's experience. The questions below are framed in an open way to fit with the empirical nature of this research and the experimental approach adopted. By framing the questions in an open way, greater opportunity for both responding to individual communicative preference and for exploring connections between the children's narratives and those of wider stakeholders can be facilitated.

Children

- 1.1 What do children on the Autism Spectrum say/communicate about their school experience?
- 1.2 How do these experiences vary across a range of school spaces?
- 1.3 What are these experiences like over time?
- 1.4 How do children on the Autism Spectrum perceive their social relationships and how do these relationships vary over time?

Stakeholders (Teachers/TAs/Parents)

2.1 How do stakeholders understand relationships, learning experiences and the general day to day school experiences for children on the Autism Spectrum?
2.2 How do stakeholders position themselves in relation to the child's experience? What is their experience of working with/living with a child on the Autism Spectrum?

Overview of Methods and Analysis				
Method	Research Questions	Group Sampled		
Visual Narrative	1.1, 1.2 and 1.4	Children identified as being on Autism Spectrum		
Pupil Diaries (all variations)	1.1, 1.2, 1.3 and 1.4	Children identified as being on Autism Spectrum		
Semi-structured Interviews	2.1 and 2.2	Teachers, TAs and Parents.		

Table 5. Overview of Methods and Analysis

3.8.1 Visual Narrative

Visual Narrative offered much potential to address the requirements outlined above. Due to its visual nature, it offers a way of breaking from traditional research methods and makes it more realistic that all children would have the opportunity to access the study in some form. Carrington et al. (2007) and Ryan (2008) highlight the potential this method offers for working with those who communicate in non-traditional ways. In keeping with its original purpose, this research utilised photographs as a way of facilitating conscious reflection on familiar places within the school environment (Carrington et al. 2007). In this study, Visual Narrative was carried out in two stages. Firstly, children explored their school spaces and had the opportunity to take photographs of places and spaces across their school. Secondly, they the photographs were then used by the children to create a photo video using Microsoft Photostory.

Gathering Photographic Evidence

The first stage of the Visual Narrative process provided the children with the opportunity to use cameras to capture aspects of their school environment. Cameras were seen as an inclusive tool because the potential they offered for technical ease in operate and participation would be based on individual choice rather than limited by technical skill. Einarsdottir (2005) in her early year's research argues that the use of cameras allows for almost all children to take part and as a result they provide an alternative to traditional ways of gathering research data within the social sciences which rely on reading, writing and abstract reasoning (Booth 1996).

Communicating Photography Task to Children

Given that it has been identified that communication has been identified within this research as being at the heart of facilitating participation, it was seen as critical that attention was paid to the way in which the first stage of the Visual Narrative task was presented to children. Taking up notion that visual strategies provide added information that allow children to comprehend the instructions and communications of others (Spears and Turner 2015), the task was shared with key staff in each school and a Speech and Language Therapist who had worked with children across the sample group. Subsequently amendments were made on advice of these interactions.

A visual schedule was drawn up to guide children through the photography task. Hodgdon (2011) defines a visual schedule as an example of a visual tool that offers information to children on the Autism Spectrum or other communication challenges. Understanding of the structure of new events is recognised as a way of supporting children on the Autism Spectrum because they can help to clarify verbal instructions, aid children in organising and predicting activities, and may give them confidence to complete tasks (Rao and Gagie 2006). The task scheduled that was used can be seen in appendix 5. Careful consideration was given to the layout of this task and it was recommended by school staff that a definitive number was placed upon the number of places the children were expected to visit to give the task structure using the same principles that the visual schedule was providing. In addition, taking into account the challenges around social imagination discussed above, a list of the places in the school supported by a picture symbol produced by the Boardmaker programme. The formatting and use of symbols from this programme was already familiar to all participants across all school sites hence the decision to use this.

The challenges of participant generated photographic data is not often discussed (Byrne et al. 2016). In gathering the photographic data to support the narratives, children were sent off around the school to photograph places that were important to them. They also had a map of the places they might visit as given the possible challenges around imaginative thinking, this was put in with the intention of providing some structure. It was recognised that whilst this may have been a guide for pupils, there was also a danger that it could have resulted in myself as researcher dictating the spaces to access and not to access. It should also be noted, that eight out of the ten participants were accompanied by an adult Teacher or TA whilst completing their photography task. Consequently, there has to be an awareness that adults who were with the children may have influenced what photographs were taken and where they were taken (Deans 2007). Furthermore, pre-established school boundaries that were beyond this research may have been off limits thus impacting upon individual responses. This was the case for one child who was not allowed to take a

photograph of the Head Teacher's room despite reporting that it was a space he was often in.

Creating Visual Narratives Using Photostory

Freire (1970) highlights the importance of the visual imagine suggesting that it can invoke a criticality about the forces and factors influencing one's life. While photographs can raise awareness of a child's 'inner world', without an accompanying narrative, the depth of meaning reached can be reduced (Byrne et al. 2016). As Mitchell (2011) reminds us, we are now living in an age of an ocularcentric world and we need to be careful not to focus so much on the visual that the social sciences simply become a 'discipline of pictures' (Mannay 2015). Prosser (2006, pg. 17) argues that 'images as far as research is concerned will always need words'. Without an accompanying narrative, the lone image cannot act as authoritative evidence as it may contribute to the 'indignity of speaking for others' (Delezue and Foucault 1990, pg. 10) thus running the risk of misrepresentation.

This research sought to use the photographs taken to elicit responses from the research participants in an attempt to get closer to their experiences. To generate this meaning, this study uses Microsoft Photostory as an alternative to semi-structured interviews. Within the context of traditional semi-structured interviews, photo elicitation is used to invoke comments, memory and discussion (Banks 2006, pg. 87). Photo elicitation is a method that can give vague memories sharpness, focus and unleash a flood of detail. Microsoft Photostory offered the benefits offered by photo elicitation but removed the social interaction component inherent in semi-structured interviews and also provided flexibility to accommodate a wide range of communicative preferences.

Microsoft Photostory was a useful platform to realise the goal of equality of communication. It provided the opportunity for the child to draw on a range of communicative functions depending on their preference. The programme allowed for children to add text or speech to the uploaded photographs and it reduced the

pressure they were under as they were not required to respond in live time as would be the case in a traditional semi-structured interview. Similar to the approach taken with the task of taking the photographs, a visual schedule (Rio and Gagie 2006) outlining what to do (appendix 6). Each child had the opportunity to practice with Photostory before completing their Visual Narrative following some lessons where I had modelled the programme for them.

While the approach of using Photostory was an attempt to mediate the challenges that some children on the Autism Spectrum may face with social interaction, this did not work as well as originally envisaged. 4 of the 10 participants requested that an adult sit and complete the task with them and were very open in asking for help. Two of the children asked for the adult to do the typing for them and two organically developed into a semi-structured interview using the photographs that had been uploaded to Photostory. The two photo videos produced through the semi-structured interview format provided the richest data and allowed for further probing into the floods of detail that were coming through as the children gave their answers (Banks 2006).

3.8.2 Diaries

Diaries were selected as a research method because they provided a way of supporting the crystallization of the data gathered around the children's worlds and provided a way of capturing the child's experience over time potentially capturing critical events that would have otherwise been missed (Barbour 2009). The Visual Narratives had been limited in their ability to capture data over time and were restricted to the snapshot provided at the time the activity was undertaken. However, diaries allowed things to be captured over time. In addition, Humphrey and Lewis (2008) had successfully used diaries with older children on the Autism Spectrum and this had provided rich and insightful data. This study had focused on older children all over the age of 12. Through attention to the individual communication preference of each child, the opportunity was identified to take a similar approach with younger children as it not only allowed access in their study

but the flexibility of communication methods offered within their framework allowed for the participation of all. The value placed on this method by Humphrey and Lewis for children on the Autism Spectrum is important because they recognised it as an underused method that allows data to be gathered that is otherwise hard to obtain.

Diaries took a semi-structured format with general areas outlined by myself as researcher but I also provided space for pupils to elaborate on other issues that emerged. The decision to provide a semi-structured format was due to the possible challenges with self-organisation prevalent within medicalised understanding of Autism. Impairments in 'executive functioning' may have the potential to impact on the child's ability to self-organise and therefore an element of structure was built into the diary (Attwood 2013). A range of diary options were provided at the outset with children able to choose from a written diary using pencil and paper, typed diary using Microsoft Word on the computer or an audio diary using an mp3 recording device. Through discussions with the children, it was also agreed that they could choose to draw in their diary and in response to one child, this was extended to Microsoft Paint a request that came about due to the fact that one of his peers could draw in his paper based diary but he did not have this option when using his digital diary. A visual prompt sheet was created for each diary type with space within this to cocreate additional aspects of the diary.

Wellington (2000) alerts us to the issues using diaries and these challenges came to the fore during the study. He highlights that diaries can be time-consuming, mentally demanding and usually require a sufficient level of literacy skills to complete. Indeed, the literacy skills required impacted two of the children within the study and there were no variations of the diary that proved to be a suitable alternative. In both these instances, an adult scribed the diary for the child each day. Through a topic being carried out in the class, John and his teacher requested that they moved to a video-based diary after the first two weeks and then extended this beyond the study due to the communication it afforded between student and teacher. An account of this method can be found below.

The warning issued by Bryman (2012) that diaries suffer from attrition was certainly the case. Darren started off with very detailed accounts of his day but by weeks 5 and 6 he had resorted to writing very little and the comments that were written were clearly in opposition to the task at hand. His comments were directed at me included 'none of your business' and responding daily by simply writing 'epic' in almost all of the boxes with reduction in the care and attention shown previously.

In keeping with the ethical principles of this research, children were explicitly given the choice regarding the sharing of their diaries at the end of the study. Prior to handing them over, I went over the ethics around handing over their diary. Despite this discussion, only James had decided that his diary was 'too private' to be handed over. Whilst it was disappointing that James did not hand over his diary, it was somewhat reassuring that he had been given the space to make this decision independently.

3.8.3 Video Diary

A key component of this research framework was building trust and rapport with the research community (Mertens 2009). During the planning stage for this research I met with the class teacher for each child and issued them with a pack outlining the purpose of the research but also within this had provided scope for them to contact me regarding any 'changes' or 'comments' that they felt would be beneficial. Two weeks into John's diary phase, his teacher contacted me to ask if they could move towards a video diary. They had been doing filming as part of ICT and he wanted to move this from a computer-based diary to a video based one due to the interest John had shown towards the filming. In keeping with the research's aim to ensure an equality of communication and participation, the idea was readily accepted. It also demonstrated that I had managed to create a relationship of mutual respect as the teacher had consulted with me before making changes.

Noyes (2004) highlights that visual research methods have been the poor relation in the social sciences with video diaries in particular only making a minor contribution. Buchwald et al. (2009) point out that they are a well-suited method for research with

children. They retain the same benefits as other diary systems in that they capture the child's experience over a longer period of time. This method offers much potential for children who communicate in non-traditional ways. Indeed, video diary can capture non-verbal forms of communication (Joseph, Griffin and Sullivan 2000) that are dominant for some children on the Autism Spectrum and may include gestures or Makaton signing. It was also noted that due to fact that the video camera being used was small and portable, John did not always film from the same location and on one occasion provided his diary update on the way back from the local supermarket with his class and told us about his trip and then used the portable camera to show us the surrounding area and talk about it.

Due to the power of the video diaries, John's data appeared to be the most vivid and real of the whole data set. This resonated with Noyes' (2004) assertion that in comparison with written forms of data, video diaries offered a richer body of data. Consequently, as the researcher I noted this in my journal and explicitly kept this at the forefront of as I carried out data analysis. John reported that he much preferred the typed diary that he had originally started out with. He described the video diary as 'very fun' and said that it was much easier than the typed one. The video diary proved to be an excellent alternative to a written diary and is useful method for those who have difficulty expressing themselves in writing (Buchwald et al. 2009).

3.8.4 Semi-Structured Interviews

Semi-structured interviews were set up to serve two purposes. Firstly, they were designed to explore the perceptions of key stakeholders regarding inclusion. Secondly, they also afforded the opportunity to explore in greater depth points of interest that emerged during data collection. All teachers, parents and TAs were invited to participate in interviews. Not all adults who were invited to participate in interviews took up this opportunity – an overview of those within the child's team and those who were interviewed can be seen in table 3. Semi-structured interviews were chosen because these are identified as the 'gold standard' of qualitative research (Barbour 2008, pg. 113). Drever (1995) sees the advantages of semi-structured

interviews is that they broadly set out the ground to be covered beforehand but the structure is left to be worked out during the interviews.

Prior to starting each interview, I discussed the ethical implications of giving an interview. This information had already been provided to all stakeholders in the letter that invited them to take part in the interview (see appendices 8,9 and 10). To remind them of the information provided in the letter, I provided them with an additional copy of this and explicitly drew their attention to confidentiality, the storage of data and the processes in place to ensure anonymity such as changes to their child's name or the school's name. I also made them aware that the research was being conducted in accordance with the Revised Ethical Guidelines for Educational Research (BERA 2004). Prior to starting each interview, I asked each participant to sign a consent form (see appendices 11, 12 and 13) which again echoed the same information provided in the letter.

At the beginning of each interview, I was explicit about the rationale for the research and situated it within its political context. This led to an interview style that was empathetic in nature. It was recognised that while the interviewees may have arrived at interview with their own agenda, I felt that it was important that they understood the drive for social justice behind this research. Fontana and Frey (2005) identify an empathetic approach to interviews as a 'technique to persuade the interviewee to reveal more'. However, in this context it was used as a method to establish rapport with research participants but was not seen as an ethical antidote to moral blindness (Watson 2009).

Interviews are an interpersonal matter (Cohen and Manion 2007, pg. 425). A hierarchal focusing (Tomlinson 1989) was used to guide each interview and its structure allowed for the conversation to develop in a more natural way (Tomlinson 1989). Kvale (1996) highlights the importance of keeping an interview moving forward and this can be challenging due to the way in which semi-structured interviews are set up. Semi-structured interviews tend to follow a format whereby all

participants are asked the same questions in the same order. I created a proforma that had a number of questions under each theme that I planned to explore with the subject. The approach taken allowed the interview to remain structured but prevented it from being driven by a quest for the 'right answers' (Denver 1995). I also explore other themes if they emerged during the interview rather than closing it down and continue to follow a rigid script.

3.9 Data Management

The research produced a vast array of data in different formats and this had to be carefully managed in keeping with the data protection act 1998. Different approaches were taken for each data type and storage procedures identified to ensure they were protected.

Digital Data

Photographs on Cameras and Visual Narratives

Photographs were taken using cameras that I provided for children. Following each research task, I uploaded these to my laptop computer which was encrypted and was password protected. Completed Visual Narratives and digital diaries were stored and protected in this way too. The same process was used for digital recordings of audio interviews.

Paper Data

Many of the children produced paper-based diaries. Once these diaries were handed to me at the end of the project, I stored them in a locked filing cabinet within the school to ensure their safety.

3.10 Research Journal

To help me make sense of my experience in carrying out this research, I employed the strategy of keeping a research journal. My research journal was much more than a mechanical means of recording information then using it to recall facts later. It was employed both as a reflexive tool and also as a means of notetaking, helping me to

work understand the field or research and to further understand the research process. My diary entries drew on three main approaches to notetaking as outlined by Burgess (1981). Firstly, some of the accounts were substantive focusing on recalling facts and presenting them in order. Secondly, methodological notes were taken which included outlining my own involvement in an event and recognising the role that I may have played within an interaction. Finally, I employed the use of analytic accounts which served the purpose of raising questions or generating ideas that helped me to make sense of the data.

3.11 Conclusion

This chapter was split into two parts. In the first half, it starts by arguing for an alternative construction of Autism by drawing on literature from Critical Autism Studies. This provided an alternative reading of Autism that enabled a focus on the communicative strengths of this group as opposed to traditional constructions that focus on communicative deficits. By adopting such a view, research that is visual was identified as a good starting point given the pre-existing evidence within the Autism literature. However, whilst a visual approach provided the starting point, the research did not assume that all children on the Autism Spectrum preferred a visual approach to communication and therefore created space throughout to accommodate individual preferences.

The second half of this chapter focused on doing the research highlighting the advantages and disadvantages of each research method selected and explicitly outlining how each worked in practice. It was an important aspect of this chapter that this process was explicit as the gap within the literature highlighted a reluctance amongst researchers to take on work with children on the Autism Spectrum due to the communicative challenges they often identify. The work outlined in this chapter demonstrates an example of such work. Both Visual Narrative and Diaries were the key methods developed for eliciting the voices of children on the Autism Spectrum and the flexibility afforded within the way that both were delivered in practice, allowed for children to adopt their preferred communicative preferences. Semi-

structured interviews were also discussed the method chosen to capture the views of wider stakeholders including teachers, teaching assistants and parents.

Chapter 4 Data Analysis Framework: Thematic Analysis

'Imagination is the only weapon in the war against reality.'

Lewis Carroll

4.1 Introduction

This chapter sets out to make explicit the way in which data was analysed and interpreted within this research. In identifying a framework for data analysis, a number of inter-related factors had to be taken into consideration. In the previous chapter of this thesis (chapter 3), the aim of creating methods that had the inclusive potential for all children on the Autism Spectrum within the study resulted in a wide diversity in the types of data produced. The data set ranged from Visual Narratives produced by children that contained images, typed text and speech to traditional semi-structured. Consequently, a data analysis framework that was both flexible enough to lend itself to analysis of all the data types produced but equally rigorous in terms of its analytic scope was required. A framework that provided such flexibility can be found within Thematic Analysis (TA) (Braun and Clarke 2006) as it offers a way of creating a consistent approach across the diverse data set yet was not restricted in terms of its methods and methodology (Clarke 2017). While it is often seen as a fault of TA that the researcher is required to piece together a number of theoretical components (Braun and Clarke 2018), it was this space within the framework that made it a suitable method of analysis for this data set. It provided scope to embrace the diversity of the data set and tie together an analysis of research methods that are not traditional bedfellows. Within Braun and Clarke's original 2006 paper, the method of TA was outlined in a step by step fashion. The authors have argued that TA should not be used in a rigid step by step way and that the steps were only there as a guide (Clarke 2017). To capture this, I think through the step by step by drawing on Deleuze and Guattari (2001) and argue that the process is more of a 'mapping' than a 'tracing'. Furthermore, I also critically discuss the data analysis process making transparent both the theoretical and practical decisions in terms of how the data is understood. To think through the data beyond the surface level, the philosophers Michel Foucault and Gilles Deleuze are used to rupture the dominant discourses that prevail from the data set.

4.2 Theoretical TA Framework

There is a diversity of approaches to TA and it is not uncommon to see researchers cite sources on, and sometimes follow procedures for TA that do not align conceptually or in practice (Braun et al. 2019). Whilst TA has come a long way since the serious criticisms levelled at it over a decade ago (Braun and Clarke 2006) with countless papers citing themes emerging with no robust supporting framework to justify the assertions made, it is vital to be explicit about the theoretical underpinnings of the approach taken. Braun et al. (2019) identify three schools of TA 'coding reliability', 'codebook' and 'reflexive TA'. Aspects of these approaches are often folded together or presented in a confused way. In setting out this framework, an exploration of these three approaches will be undertaken, identifying which one is most suited to the task at hand and ensuring that such confusion does not result from this reading.

'Coding reliability' approaches can be associated with the work of Boyatzis (1998), Guest et al. (2012) and Joffe (2011). This approach can be seen as a partially qualitative TA. Whilst qualitative data is collected and analysed using qualitative techniques, it prizes reliability and replication of observation. Consequently, this aligns it more with quantitative approaches and firmly situating it within a post-positivist framing. The accuracy of the coding framework is usually based on the agreement of multiple coders with a focus on scientific rigour as opposed to seeking out what is interesting about the data. Braun et al. (2019) see this approach as problematic as it requires disregarding what is central to good qualitative research depth of engagement achieved through an open and exploratory design.

In contrast 'Codebook' TA (although this is not a term the authors that employ this approach use) sits somewhere between 'coding reliability' and 'reflexive TA'. Within this approach, themes are pre-determined in advance of full analysis and consequently those themes are that developed resulting in domain summaries which explain at surface level rather than providing deeper engagement with the data.

Such an approach delimits the depth of engagement and flexibility central to good

qualitative research practice. While this approach is often seen as pragmatic, it fails to provide the scope required to fully generate the change required for this research which is driven by social justice and is focused on generating change for children on the Autism Spectrum because it merely results in an explication of the data set. Consequently, there is a need to work beyond the pragmatic. The reflexive approach to TA outlined by Braun et al. (2019) provides a way of getting beyond simply summarising what has happened and what has been said towards deeper engagement with the data. Consistent with the aims of this research, reflexive TA is usually motivated by social justice goals and is concerned with providing the opportunity for marginalised groups the opportunity to have their voices heard. The role of the researcher is therefore not to simply produce an accurate summary of the data nor to deny or minimise their own influence but instead to embrace the role they have in shaping the data. The themes that develop from such an approach come from considerable analytic work on the part of the researcher and it is therefore essential that an over-arching methodological framework is established to maximise the power of this analytic work.

4.3 Reading Data against the Grain

As stated above, it is paramount that a strategy for reading the data is adopted that gets beyond summarising and instead allows for deeper engagement (Braun et al. 2019). As a starting point, a strategy of reading data against the grain will be adopted. To read data against the grain, a carpentry metaphor provides an opening that allows us to proceed in a different way. Myscofski (2001) offers an excellent way to critically approach the reading of data. It allows pursuit of different 'logics of judgment' to those found within the dominant narratives. Myscofski (2001) outlines what reading against the grain offers:

'Usually of course, woodworkers find and follow the grain: it's easier to work with the fibrous structures in the wood and thence to work on a large scale with large pieces to build ones case, cabinet or table. Cutting against the wood's grain is difficult: it entails deliberate actions athwart the rigid structures already present in the material,

but it may reveal hidden contours within the wood – new shapes, new forms, new vistas.'

Myscofski (2001)

Indeed, cutting with the grain would replicate what can be easily summarised from the data. Going against the grain does something altogether different, it provides a way to reveal the hidden contours and explore new shapes, new forms and new vistas. It highlights the importance of finding the in-between spaces and seeking out what is interesting within the data. Identifying these critical spaces can viewed as 'a-ha!-moments' which allow us to engage in our reading against the grain. A-ha-moments are described by Holbraad and Pedersen as:

"A strand of anthropological thinking that does something altogether with the discipline's relativizing a-ha!-moments, namely to run with them. Instead of encasing them within generalizing theories about culture, society, human nature and so forth, or trying to explain them away with a good dose of common sense, this way of thinking in anthropology seeks deliberately to take these moments as far as they will go, making full virtue of their capacity to stop thinking in its tracks, unsettling what we think we know in favour of what we may not even have imagined

(Holbraad & Pedersen, 2017 pg. 2 original italics)

4.3.1 Using Philosophy to Read Against the Grain

To stop thinking in its tracks and begin to read the data in a way utilises a different reimagining, then an approach is required that makes the over familiar seem properly strange; seeking to be playful and helping us to resist the limitations created by educational policy, practice and research (Maclure 1995). To create these openings, I inspiration is taken from Gregoriou (2004) and Allan (2008) who both suggest that educationalists need to establish a 'minor philosophy of education'. Such an approach calls for a philosophy 'which isn't haunted by the big figures of philosophy's fathers' but rather 'picks up these ideas from social science without

anxiety about risking its identity and connects these ideas in new encounters' (Gregoriou 2004, pg. 234). Within this context, philosophy can be seen to provide both a practical and pragmatic function. It provides a set of theoretical tools to unsettle and disturb current ways of being. It is with this in mind, that I put the philosophical concepts to work on the data set and use it as a 'creative' platform to allow us to rupture the current order and begin to identify new ways of 'saying', 'being' and 'doing' (Ranciére 1999).

Working through the data with this philosophy provides a different way of making sense of the key event and opens-up ways for us to potentially re-think and re-read the experiences of children on the Autism Spectrum. Ingold (2013) suggests that our ability to dream and imagine was closed-down by Francis Bacon in the 16th Century who argued there was an absolute distinction between dreams of imagination and the patterns of the world. While the data may allow identification of some patterns of the world, dreaming and imagination will allow space to think about what we might do differently. By unleashing the imaginative power of philosophy, the dominant 'logics of judgment' can be interrupted and new possibilities created.

I therefore approach the reading of the data with two theoretical hats on, first at a surface level and second seeking to get behind the text and identify its blind spots (Derrida 1982). It provides us with a way of creating counter-narratives and to identify alternative possibilities that differ from dominant discourses found around the children in the study. It utilises the imaginative function of philosophy and 'unleashes it on the impasses within the narratives as a way to establish new beginnings' (Allan 2008, pg. 56).

Drawing on philosophy provides a way to resist the restrictive notions that are currently found within educational research that are obsessed with 'what works' and are bound within practices that promote reductivism and anti-intellectualism (Bridges and Smith 2006). This is evidenced in approaches to systematic reviews of key educational topics the likes of which are found within work produced by EPPI

(Evidence for Policy and Practice Information Centre) and EEF (Educational Endowment Fund), the latter is currently promoted by the Scottish Government as a tool to identify interventions that 'work' (Education Scotland 2019). Bridges and Smith (2006) argue that while it seems logical to demand policy and practice be evidence based, we should proceed with caution as within this model the only data that is valued is that based on a very narrow, *apparently* scientific concept of empirical research (Bridges and Smith 2006, emphasis in original). It is against this backdrop that Gilles Deleuze and Michel Foucault offer potential as philosophers they provide ways of thinking differently and act as a sort of 'guiding light' to help reverse the dominance of instrumental reason (Mansy and Cole 2009).

4.3.2 Gilles Deleuze and Michel Foucault

In reading the data, the toolboxes of Gilles Deleuze and Michel Foucault will be drawn upon. Both of these thinkers are suited to the task at hand as they are concerned with achieving recognition of minority social groups. Indeed, along with other philosophers such as Derrida and Lyotard among others, have been recognised as philosophers of difference as they have an orientation towards philosophy as a political act (Allan 2008). As this research is driven by an agenda to generate change for children on the Autism Spectrum, then these thinkers provide philosophical tools to generate change. Whilst their toolboxes have been drawn upon extensively across a variety of research genre, their theoretical tools have yet to be put to work on a data set that has been generated with the voices of children on the Autism Spectrum in Scottish primary schools at the centre.

French Philosopher Gilles Deleuze's has had an impact across disciplines with Michel Foucault suggesting that the 20th Century will come to be known as 'Deleuzian'. Central to Deleuze's thinking is that the role of philosophy is designed to create concepts. These concepts do not label or represent the world so much but rather they produce new ways of thinking (Colebrook 2002). For Deleuze, concepts are not labels or names that are attached to things but instead they produced an orientation or direction for thinking. Concepts are philosophical precisely because

they create possibilities for thinking beyond what is already known or assumed (ibid). Whilst Deleuze has created a vast array of concepts to enable thinking about the world in new and different ways, this thesis takes a different Deleuzian turn and instead of drawing upon his better-known works in the English language A Thousand Plateaus (2001) and Anti-Oedipus (2004) co-authored with Felix Guattari, it instead draws upon his earlier where he explored the work of an earlier French philosopher Henri Bergson. The study of Bergson provided Delueze with materials to develop tools for his own box. This chapter will draw on his book Bergonism (1988) to provide fresh material for reading data with children on the Autism Spectrum.

Michel Foucault is one of the most influential philosophical figures in the 20th Century and this is reflected in him being one of the most cited authors across the humanities and social sciences. At the core of his work was his concept of power which is knotted to knowledge. Foucault did not outline a general theory of society, rather he identified a set of 'problems' and provided some tools that he hoped others would use (Foucault 1977). Foucault expressed his frustration that so much effort was devoted to what his writings might mean rather than his followers doing the sort of practical analytical work that he advocated so vigorously (Ball 2013). Krasmann (2017) sees him as providing tools for analytic thinking that sets the conditions for seeing and thinking differently. His tools facilitate space for identifying paradoxes which enable us to see the limits of our perspective and simultaneously transgress these limits. Such is the power of his work that it allows us to decipher our blind spots and find new ways forward.

Foucault's (1977) early work focused on the knotting of power and knowledge exposing the power structures inherent in modern institutions. While he personally avoided classification, he was able to open-up the questioning of the rationalistic and humanistic grounds upon which modern society bases its conception of itself (Usher and Edwards 1994, pg. 83). It is Foucault's later work that this thesis draws upon and in particular his lectures given at the Collége de France between approximately 1977 and his death in 1984. During this series of lectures, Foucault makes a shift in the direction of his thinking moving from questions of biopower to that of

government. It is through this radical change in direction that he makes the transition to the problematic of the 'government of self and others' (Sennerlart in Foucault 1978 afterword).

4.4 A Deleuzo-Guattarian Approach to Thematic Analysis

Traditionally, TA is described as a step by step method for doing data analysis (Braun and Clarke 2006). However, in their recent work, the authors have been explicit that their step by step process was intended to act as a guide not a rigid and restrictive way of doing analysis (Clarke 2017). In line with this way of thinking, the decision to adopt a Deleuzo-Guattarian (2001) approach to TA. Deleuze and Guattari's metaphor of 'mapping' and 'tracing' is a useful way to resist the reductionist ways that some researchers employ either Braun and Clarke's method in a systematic way or the 'codebook' approaches to TA with the full process focused on scientific validity and rigour (Boyatzis 1998). In such approaches the interpretive component of qualitative research is closed-down and reduced to a set of procedures to be followed. In Deleuzo-Guattarian (2001) terms, this can be seen as a type of 'tracing' which they define as based on an over-coding structure or support axis, something that comes ready-made (pg. 12). The seduction of 'tracings' are appealing when uncertainty and disorientation is present, such situations lead to a retreat into the safe space of the knowing (Mazzei and McCoy 2010).

While mappings and tracings are distinguishable, it is not helpful to put them into binary opposition (Deleuze and Guttari 1987, pg. 12). Tracings cannot be avoided and cannot be separated from the map – the trace is always put back on the map (ibid, pg. 13). To chart this territory is not to view the intrusive trace as an error: what the tracings reproduces of the map or rhizome are only the impasses, blockages, incipient taproots or points of structuration.

In adopting a TA that maps rather than traces it is useful to keep in mind the challenge question provided by Braun and Clarke (2018). They suggest following

'what is interesting about the data' rather than simply explicating the data published in (2007). Braun and Clarke (2018) state that it was never their intention for their original paper to be used as a set of strict guidelines that should be adhered to. A way of resisting this is to follow their step by step guide to TA but rather than seeing it as a tracing in its own right that is over-coded and restrictive, this research sees the power of thinking about this process in a much more fluid way and adopts the idea of putting the tracing back on the map and using this to provide structure to the terrain.

In carrying out this data analysis, I therefore followed the tracing but within the context of a map that allowed for me to engage in an active way. This active role within the analysis process allows for the resistance of the passive researcher who tends to produce discussions about 'data being analysed' and 'themes emerging from the data' (Braun and Clarke 2006). Such accounts of themes 'emerging' or being 'discovered' denies the active role of the researcher. Ely et al. (1997) argue that such an approach could lead the reader to believe that the themes are residing in the data just waiting to be found. The map drawn upon is 'detachable, reversible and susceptible to constant modification'. It creates 'multiple entryways' and produces encounters that come up against and move through the blockages inhibiting a return to the same.

The step by step guide outlined by Braun and Clarke (2006) is better thought of in terms of a 'tracing'. This operated as a recipe rather than a blueprint for developing the codes and themes. In line with Braun and Clarke's (2018) revision of their step names, I have adopted the term 'theme development' rather than searching for themes to capture the active role the researcher plays in this process. The steps they suggest that the following steps are followed:



Figure 2. A model of Thematic Analysis: a step by step approach.

While these steps are presented in logical order, they operated as tracings on a map. Like the map the steps outlined here had 'multiple-entryways' and throughout the process I did not always work in a restrictive logical way. In keeping with this spirit, I adopted the term 'entry points' rather than 'steps' as this helps to capture the dynamic reality of the process. The process was iterative requiring zigzagging back and forth between stages, checking and looking for blind spots and reading the dominant narratives against the grain.

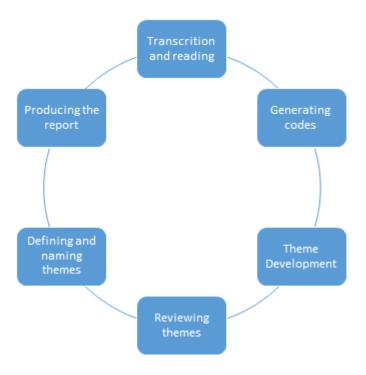


Figure 3. A Model of Thematic Analysis: a Mapping Approach
4.5 Transcription and Reading Data

4.5.1 Familiarisation

Prior to undertaking the transcription of data, I immersed myself in the data set to familiarise myself with it and to develop a surface level understanding of its depth and content. As Marshall and Rossman (2014) remind us, there is no substitute for intimate engagement with your data. They suggest that the researcher should think of data as something to cuddle up with, embrace and get to know better. The initial reading of the raw data was an interpretive act and it was from the outset that I started to begin to make sense of and theorise about it. I read, watched and listened to all the data as it came in and did this once more before moving onto coding.

Due to the range of data collected, this phase was time consuming but as Braun and Clarke (2006) point out, taking time at this phase and not rushing it provides the 'bedrock' for the rest of the analysis. It enabled me to grasp the terrain and understand how to navigate it. At this stage, I kept a notebook and begun to generate ideas for coding and this was something that I revisited during subsequent stages of the analysis. This part of the process gave me an overall sense of the data

and provided me with a confidence as I moved into the next entry point. The analysis greatly benefited from a broad understanding of the terrain as it helped me to contextualise data as I started to code it and later develop, define and redefine themes. It also helped to balance out any underlying assumptions about data that I had collected and data that had been produced by research participants independent of me.

4.5.2 Transcription

I made the decision to transcribe the data myself to help further familiarise myself with its content. The transcription of the data was my third reading of it and again this in itself was an interpretative act where meanings were created. I was also aided by first hand-knowledge due to my involvement in the data collection, expertise in the interview subject and the benefit of having participated in both verbal and nonverbal exchanges with the participants (Halcomb and Davidson 2006). I continued to add to my notebook during this phase to further make sense of the information. Given the array of methods I had employed and also those that were created by research participants, I had a number of important decisions to make regarding how data was transcribed. These decisions are important as they have an impact on validity and reliability of the analysis.

Braun and Clarke (2006) propose that in thematic analysis, the very minimum produced should be a rigorous and thorough 'orthographic' transcript. However, in line with the ethical principles employed across this research, non-verbal behaviour was recognised as key in ensuring ethically sound research with children on the Autism Spectrum. The transcriptions are therefore rigorous and thorough 'orthographic' transcripts with additional notes to detail important non-verbal information where it was available. However, it was not always possible to obtain non-verbal information due to some of the data collection methods e.g. audio diaries, individually produced Visual Narratives. Non-verbal data was not recorded implicitly in the transcript, instead I found it useful to account for this in the reflective journaling that took place immediately after an interview or activity. This journal was a tool for making sense of the data as it came in and allowed for the capture of additional observations while they were still fresh (Halcomb and Davidson 2006).

The transcription of research data was a momentous task within this study due to a number of participants choosing audio diaries as their method of recording. The time taken to transcribe has been identified as one of the main disadvantages to transcription by a number of commentators with Walford (2001) stating that he 'rarely transcribed more than a few interviews for any of his studies due to the time it takes' (Walford 2001 pg. 92 in Cohen and Manion 2013 pg. 539). However, despite the time taken to transcribe portions of the data set, I moved ahead with this as I felt that by not doing so would dilute the voices of the research participants that the study was founded upon. It also helped me to further familiarise myself with the dataset.

The diversity of data gathered in this study meant that a strategy to create some consistency across data types was important for analysis. I was mindful that I did not want to reshape the data and thus serve to reduce the potential impact of some individual data items. Some of the data items did not require transcription and were in a position to be coded in their current form e.g. written diaries. I decided to make the following decisions around each data as outlined in table to create some sort of consistency to aid analysis.

Transcription						
Data Type	Transcription	Reflective	Photos to			
		Journaling	accompany data			
Visual Narrative	✓ Only if	✓ If child had	✓			
	children had	requested				
	given a	adult				
	verbal	support to				
	account.	construct				
	Some	this				
	children had					
	chosen to					
	type over					
	text.					

Audio diaries	√	NA	NA
Written diaries	NA	NA	NA
Video diaries	✓	Notes taken to capture key non-verbal cues	NA
Interviews with stakeholders	✓	√	NA

Table 6. Transcription

The biggest dilemma I had was around the management of the Visual Narrative transcriptions. Photo elicitation was used to invoke comments, trigger memory and unleash a floor of detail when children were creating their Visual Narratives (Banks 2006). Given how central this component was to data creation, it was essential that it was not lost during the transcription phase. A further consideration was whether to complete a full transcript for the Visual Narrative that sat on its own, or to chuck the interview and match up the photographs with the corresponding part of the transcript. To get around this, I decided on an approach that would allow me the best of both worlds. I initially created one full transcript for each narrative and printed every photographic scene. Then I cut up the transcript and matched it to its corresponding photograph. I felt that pupil discussion around the photograph captured its essence and it worked better for it to match up so that both the visual and verbal meanings were captured. I also added notes from my journal if these contributed to an understanding of the interview.

4.5.3 Coding

Given the social justice lens that is at the heart of this study and the drive to bring the marginalised voices of on the Autism Spectrum to the fore, the approach to coding adopted is consistent with the organic flexible approach to as outlined by Clarke (2017). A social justice driver is what separates the organic flexible approach from more rigid approaches that reduce the coding process to following a set of procedures and are usually situated within a positivistic framework. The coding

approach adopted here aimed for depth of engagement and started with flexibility in mind and an open exploratory approach.

In order to achieve these aims, I approached the coding process with an open mind and embraced all the things that may have helped me to make sense of the data. However, the analysis process is dominated by the overarching poststructuralist toolbox. These overarching theories influence the analysis of data produced by all participants. Boyatzis (1998) outlines three ways of developing a code: theory driven, prior research driven and inductive (data driven). However, I would also add a fourth category as part of this professional doctorate as I already brought to the fore expertise within the field of study that would not often be afforded to such a data. While the analysis was informed by an overarching theory, other ways of developing codes were not completely abandoned as this would have the potential to close-down other things that may have been interesting about the data.

Despite being theory driven, it did not start with a pre-defined coding framework such as those found in coding reliability and codebook approaches (Clarke 2017). In such approaches the analyst is seen as passive with an expectation that they have little access to the data beforehand and agreement is achieved independently between different research analysts. Such approaches try to bridge the gap between qualitative and quantitative research (Boyatzis 1998) and therefore begin to close down the interpretive component of qualitative research thus reducing it to a set of procedures that can simply be followed. I would argue that in such approaches there is so much possibility closed-down in an attempt to conform with scientific principles and that the practitioner expertise brought to the fore in this study should be embraced. It should not be seen as 'something to be dealt with' but embraced as a tool that helps to make sense of the data. Similar to critiques of positivism, there is a danger that in the data analysis, the subject could be dehumanised thus undoing the main aim of this study (Ions 1979 in Cohen and Manion 2013).

While the approach taken was playful and experimental, it did not mean that anything goes and a systematic approach to working through the full data set on two occasions was employed. As I did not plan to use computer software to analyse my codes, I identified chunks of text and applied single and sometimes multiple codes or ideas (Gibbs 2008). I did this through the use of post it notes only on the first run through then on the second reading I also highlighted the text. The use of post it notes was initially helpful as they allowed me to adjust, shift, change, reorganise and get rid of codes as I went through. To ensure that I continued to develop my broader thinking during this stage, I continued to jot ideas in my notebook - this further helped to shape my understanding of the data. I also decided to keep all of my analysis on paper rather than within a computer document. Given my interpretive focus on getting close to the data and understanding it in its entirety, I wanted to physically spread large portions of it across the floor so I could get a wider sense of it and physically play with it.

4.5.4 Generating Themes

In starting to generate themes, it was essential to establish a clear understanding of what constituted a theme. Braun and Clarke (2017) describe a theme as capturing a common, recurring pattern around a data set, clustered around an organising concept. It tends to describe the different facets of a singular idea, demonstrating the theme's patterning in the data set (Braun and Clarke 2017). To begin identifying themes, I organised my codes into 'clusters' trying to find a commonality and a way of uniting them. I carefully considered how individual codes linked to potentially bigger themes and moved around individual codes to try and establish a good starting point. During this early stage, I decided to draw a thematic map of potential themes to help get a sense of how the themes look and how they all connected across a whole data set thus getting a more contained view of the data (see figure 2). The clustering of codes were pulled together under sub-headings and were also separated by colour as can be seen below.

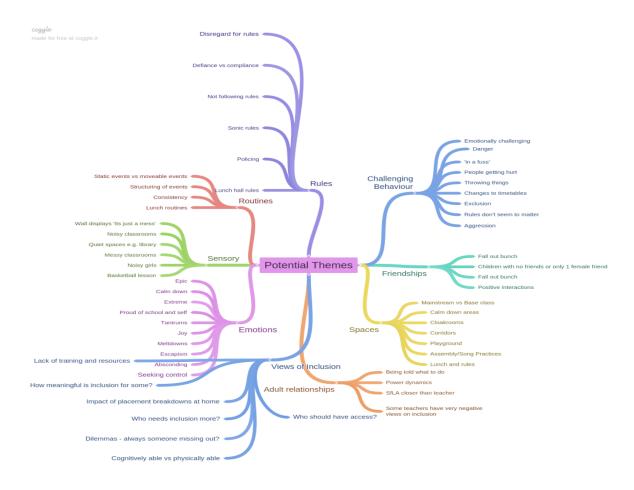


Figure 4. Map of Potential Themes

In the map it is worth looking at the ways in which individual codes contributed to how initial themes were established. By drawing attention to the code of 'challenging behaviour', it can be seen that multiple codes served to act as building blocks for this initial theme name. A number of codes were unified under the broader term challenging behaviour e.g. exclusion, aggression etc. While the map starts to unify some codes, on closer analysis the themes that have been identified do not at this point do the job that a theme is meant to do. They are significantly undertheorized and in their current form are more akin to domain summaries. Clarke (2017) indicates that domain summaries can usually be identified from their title and a clue is that they usually have short titles. She argues that when codes take on this form, it is usually evident that the researcher has not done enough analytic work and there has been a failure to get to the underlying patterns, concepts and ideas.

I recognised this and began to reflect on the current position of my theme development. If I had attempted to write up the 'themes' as at this point, it would have potentially resulted in a summary of what people said and did rather than allowing for the deep and meaningful engagement that is consistent with qualitative research. It would also have provided a very realist account of the data without deeper probing and an attempt to explore broader themes that tell us more about inclusive education.

At this point figure 4 may be best viewed as only 'potential themes' or 'candidate themes', that is the themes that will inform the next part of the analysis. While I could see that there was now some meaning starting to emerge from the analysis, further exploration of how these themes reflected the extracts they matched with from the data. Indeed, there had to be consideration to the ways in which the themes could be combined, refined, separated or discarded to further enhance understanding of the data set (Braun and Clarke 2006). Furthermore, it was essential that these were shifted from domain summaries to 'storybook themes' where ideas were fully developed.

4.5.5 Reviewing Themes: From Domain Summary to Storybook Theme

Clarke's (2017) concept of storybook theme is useful for understanding what constitutes a fully developed theme and allows us to shift to an analysis that will capture the meaning behind the surface of the data. Storybook themes are designed to explain large portions of the data and lead to better actionable outcomes as they are able to synthesize a wider range of meanings. It goes beyond what the participants say to explore wider ideas and concepts. At this stage, I began to rework the themes with an idea of bigger broader thinking at the fore. I began to look not just for the codes that came together to unify themes but started to think about the underlying ideas and concepts that would bring together a number of domain summaries under a unified code. At this point, having domain summaries was useful as it allowed me to see wider patterns within the data and helped with starting to find a unifying theme. Although I had set out to use the overarching theories to guide the coding process,

the codes at this point had been built from the data with notes connecting these to the overarching theory made in my notebook.

Braun and Clarke (2018) discuss the idea of a central organising concept to pull a theme together. It was at this stage that the analysis started to make sense and clear themes began to be defined. I was able to take my analysis up a level and generate a thematic map that captured the broader themes of the data set. This can be seen in both my data for children on the Autism Spectrum and the data for key stakeholders. As we have looked already at a map for themes derived from data produced by children on the Autism Spectrum, we will continue to look at how this has progressed by looking at the thematic maps in figures 5 and 6. These focus on intense behaviour found across the data set and pulls in a number of key points and examples as the story of theme starts to be built. Given the volume of evidence across this theme, a decision was made to focus the story of intense behaviour on only the data situated around John and Dominic. It was also at this juncture, that the sub-theme that existed around David was moved into the broader theme of 'auditory environments' forming part of the final data for theme.

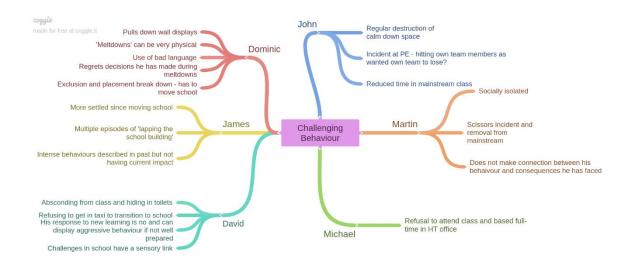


Figure 5. Map of Challenging Behaviour in Development

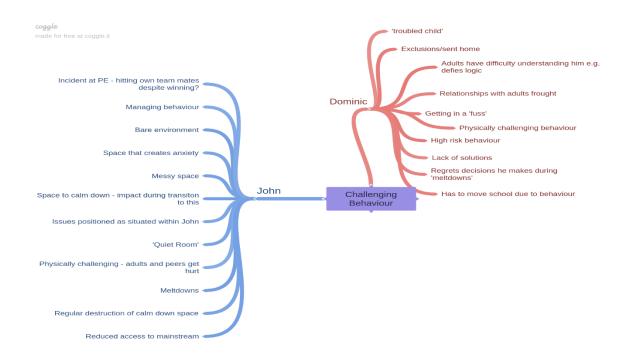


Figure 6. Map of Challenging Behaviour Final

In making the final transition towards a storybook theme, the themes presented here required further theorisation in order to ensure that they produced a story. The theorisation of the themes had been ongoing throughout the analysis process and as I moved between each of the entry points, theories offered by Deleuze and Foucault were kept at the forefront as I attempted to find the blind spots within the data. Thinking through the theme development with these philosophers enabled theoretical lenses to be adopted as central organisers pulling together multiple threads of data.

Through the thematic map outlined in figure 6, Deleuze's (1988) work was identified as a way of constructing an alternative narrative to the one found within the context of this research. It was important that a framing that enabled transgression of the idea that both Dominic and John were 'destructive' and the logics of judgment applied that positioned the responses as being fully situated with them. Through the discourses identified, there was inherent closures in thinking and the theory of Virtuality offered a way of employing a creative lens to this, thus providing a more positive way forward.

The thematic map outline in figure 7, provided the overview that provided the space to read the acoustic environment through Foucault's theory of 'governmentality'. This theory provided a way of beginning to understand the significance of power found within interactions that were dominated by sound. It allows a way of opening-up a thinking about children on the Autism Spectrum that moves beyond the inherent understandings found within the research contexts which situated auditory sensory problems as residing within the child and narrowed solutions to within-child factors. Application of Foucault's theory of 'Governmentality' facilitates a space where a more positive narrative can be constructed.

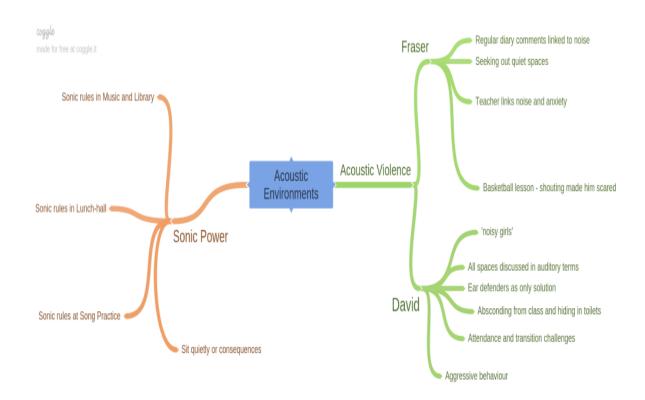


Figure 7 Map of Acoustic Environments Final

To ensure that the themes are finalised it is vital that these can be clearly defined. Braun and Clarke (2006) suggest that to test whether the theme is properly captured, the researcher should be able to define the scope and content of the theme in a couple of sentences. They also suggest that the theme name should be concise and punchy thus giving the reader a sense of what it is about. To ensure that the themes

were finalised, I carried out this activity for each theme area and have captured this in the table below.

Theme Summary				
Theme Name	Sub Themes	Supporting	Summary	
		Theory		
Reading	Challenging	Virtuality	This theme takes	
Challenging	Behaviour		the construct of	
Behaviours with			challenging	
Deleuze			behaviour that was	
			generally viewed	
			as a destructive act	
			and by putting	
			Delezue's theory of	
			Virtuality to work	
			on this it allows us	
			to challenge the	
			dominant	
			narratives.	
Reading Acoustic	Sonic	Governmentality	This theme draws	
Environments with	Power		attention to the	
Foucault	Acoustic		dominance of	
	Violence		sound within some	
			of the children's	
			account of their	
			educational	
			environments.	
			Using Foucault's	
			theory of	
			governmentality,	
			the sonic power	
			structures in the	

	environment	are
	exposed.	

Table 7. Theme Summary

4.6 Presenting Data: Justification for Vignettes

Consistent with the storybook approach within the TA, vignettes were chosen as a method for presenting the data. Stake (1995, 2005) identifies vignettes as a way to present case studies in a narrative manner. Similarly, the method was adopted here as it as it allowed a storied approach to data presentation, one in which the children do not get lost with the occasional quote being pulled to support or rebut the arguments being made. Instead, a different approach will be taken in the proceeding chapters. A vignette will be presented, drawn from the data set capturing the identified theme and then the theoretical tools from Deleuze and Foucault will be applied.

The use of vignettes here differs from how they are used within traditional qualitative research. Vignettes are usually used within the data collection phase to elicit responses from research participants. Often this approach is used to explore sensitive topics and thus provides a non-threatening way of allowing research participants to provide a response. In contrast, this research uses them at them at the presentation stage. Consequently, the information presented is not fictitious but is the creation of a story drawn from the data set. Despite the benefits that this approach has in ensuring that the child's story is told, there is a risk that as a researcher, a number of decisions were taken that may impact on the vignettes. Firstly, the data selected to form the vignette was chosen by me as the researcher and despite efforts to minimise the impact of this, there is still a bias in the data selected. To combat this, I was careful to select critical incidents rather than trying to do too much stitching. Additionally, the way in which I ordered the data in the vignette could also be problematic as this was a decision I made in constructing it. However, sticking to critical incidents also reduced the potential bias within the ordering of data.

4.7 Conclusion

This chapter set out a framework for analysing and the data gathered in chapter 3. It presented an over-arching post-structuralist framing for conducting the TA with the thinkers Gilles Deleuze and Michel Foucault positioned as central. Not only was a post-structuralist framing employed to the reading of the data but a Deleuzo-Guattarian (2001) was also employed to the TA itself. A 'mapping' as opposed to a 'tracing' approach was adopted to help understand the fluidity of Braun and Clarke's (2004) original 6 step process for TA. This theory further develops their argument that the 6 steps for TA should not be followed rigidly but are more of a guide rather than a blueprint (Braun and Clarke 2017). By adopting such an approach, the chapter attempts to highlight that the data analysis process is dynamic and fluid rather than static.

The chapter explicitly shared the development of themes. Through the use of the 6 'entry points' identified within Braun and Clarke's (2006) TA, it illustrated the process of moving from the early stages of theme generation which were akin to domain summaries through to the identification of final themes which were highly theorised and ready to be presented through a 'storybook approach'. In keeping with the centrality of having the children's voices heard, a case was put forward for using vignettes to present the data.

The proceeding chapters are focused on the experiences of children on the Autism Spectrum. In both chapters 5 and 6, the voice of the child is situated firmly within the vignettes. This is significant as within the field of Autism, the narratives that are often constructed and shared are dominated by the voices of professionals and other adults. Whilst both chapters place a focus on voice, they can be contrasted with one another as Chapter 5 highlights what the children did not say and could not say in relation to stressful situations whilst in Chapter 6, the children were able offer a clearer articulation about their sensory environments.

Chapter 5 Reading Challenging Behaviour with Gilles Deleuze

'Every Act of Creation is first an Act of Destruction'

Pablo Picasso

5.1 Introduction

This chapter sets out to explore an alternative way of looking at how challenging behaviour might be understood differently for children on the Autism Spectrum – an overview of the literature on challenging behaviour and Autism can be found in chapter 1. Two vignettes are drawn from the data set and read through the philosophical lens of Gilles Deleuze (1988). By utilising Deleuze (1988), a fresh reading of challenging behaviour can be undertaken which provides a more ethical way of understanding and responding to children on the Autism Spectrum. His concept of 'Virtuality' is used to interrupt the current discourses and provide a way of thinking otherwise about challenging behaviour.

5.2 Vignette 1

Photograph 1 was taken by John and was identified as one of his key spaces in the school. This was the Quiet Room situated within the school's provision for children on the Autism Spectrum. During his visual narrative, he described this as a place that he comes to 'calm down' and also stated that it was 'a bit messy'. As he had provided me with the opportunity to share in his discussion around this photograph, I asked him to tell me about a time he had to come to this room to calm down. This resulted in an immediate change in body language, he tensed and said 'erm mmm I just don't want to talk about it'. At this point I moved on from this line of enquiry.



Photo 1. The Quiet Room by John.

Through informal discussions during data collection and through semi-structured interviews with John's teacher, TA and mum, I was able to further explore how he interacted with the space and how adults responded to John during times when he communicated in intense ways – these were better known as 'meltdowns' within this school community. All members of the team around John broadly described a set of responses during 'meltdowns that would often put children and adults at risk by physically challenging them and would at times throw objects within the classroom, sometimes at others including items of furniture. As a result, the 'Quiet Room' or the place to 'calm down' as John defined it, was a space he was directed to when communicating in an intense way. Both John's teacher and his mum stated their frustration at John's unwillingness to discuss incidents with his teacher commenting that 'If we only knew what was causing him to react like that, then we could help him and do something about it'. His teacher described him as a 'complex wee boy who was not easy to understand'. During the interview with his mum, she said knew when John had a bad day as when he came home, he was very quiet and would share very little about his day at school.

As can be seen from photograph 1, the room was dull, had bare walls and no furniture. This is in contrast to other areas within the school which were bright, colourful and highly stimulating. In trying to keep with these expectations, John's TA

described the classroom team's ongoing efforts to make the room look attractive and highlighted the ongoing challenge of trying to create the right environment. She also described what it looked like when John was communicating in an intense way and said that he would pull down wall displays and rip the paper, throw classroom items including furniture, rearrange the classroom environment and on some occasions he would self-harm by banging his head against the wall or against hard classroom surfaces. The TA described the responses by John as both 'destroying' and 'trashing' the room. The photograph of the 'Quiet Room' exemplified these challenges with the TA outlining the various displays that had been put up only to be torn down again during these episodes. Furthermore, she described that over time she had gradually reduced the amount of furniture in this space as he had behaved in ways that she deemed unsafe including throwing items such as chairs.

Consequently, the room in its current form had no displays on the wall and no furniture.

John's teacher and TA both said that there were constantly reviewing and risk assessing the environment. His teacher spoke about the sensory challenges John had and shared his understanding of why John responded in the way he did. These responses were attributed to John's sensory system and his sensory needs. Both John's teacher and his TA referred to the impact of 'his autism' during my visits to his classroom and in their semi-structured interviews. The TA referred to him as a 'poor wee soul' stating that 'he can't help the way he is'. They both spoke about the challenges he had around 'managing' his behaviour with his mum also using similar language in relation to the home setting where she said that 'managing' his behaviour was a 'massive' challenge for their whole family.

5.3 Virtuality

To critically examine this vignette, Deleuze's (1988) theoretical construction of Virtuality is useful to interrupt the dominant discourses situated within it. It provides a framework that enables a way of re-framing these discourses by opening-up a creative space to explore new alternatives. To access this creative space, a

mapping of Deleuze's concept of Virutality must be undertaken. Once this theoretical lens is defined and its usefulness explored, it will be used to think through the problems inherent within vignette 1.

Deleuze (1988) opts for a virtual-actual relation instead of a possible-real as the former is based on the existence of several contemporaneous possibilities (virtual), which includes some that can in principle be realised in the future (or not). To enable a full understanding of virtual-actual plane, the relationship between possible and real is the best access point. Within Deleuze's configuration, the possible is the opposite of the real but this plays out in a way that they resemble one another. The real therefore is pre-formed, pre-existent to itself and will pass into existence according to the predetermined limitations that exist in relation to the possible. It is the possible that resembles the real because it has been abstracted from the real, leaving only a 'sterile double' (Ibid, pg. 98). The real-possible dynamic limits understandings of difference and restricts creative mechanisms.

In contrast, Virtuality and Actuality whilst being fully real are distinct in so far as the former is the broader set of possibilities from which the actual has been drawn. Virtualities, on their turn, are always real (they are both in the past, in the memory, and future) in so far as they can be actualised in the present. In contrast, the virtual is statistical and already shaped – it is a problematic complex, the knot of tendencies and forces that go along a situation, an event, an object or any entity, and that demands a process of resolution: its actualisation. While the real is similar to the possible, the actual is only similar to the virtual to the extent that it is one out of many possibilities: it is distilled from it. The virtual therefore offers tools for thinking beyond the limitations of what has become actual and is the space where potential solutions to problems exist and provide the opportunity to respond to the actual. The former has concrete existence and informs what actually takes places, whereas the latter is a set of all possibilities that might conceivably come into play and from which a particular actualisation is drawn; it is no less real for that fact. Virtuality is a space of creative potential where ideas and possibilities can be made and possibly actualised at a later stage, providing certain conditions are in play.

The rules of actualisation are not those of resemblance and limitation, but rather those of difference, divergence and creation (ibid, pg. 97). The process of actualisation is creation (ibid, pg.98). For actualisation to come about, the virtual cannot proceed by elimination or limitation. It must create its own lines of actualisation. Despite the real being fully reflected in the possible, the actual does not resemble the virtuality that it emerges from. The key difference is within the process of actualisation. There is a difference between the virtual and the actual at which is arrived. Deleuze sums up the relationship between Virtuality and Actuality by stating 'in short, the characteristics of virtuality is to exist in such a way that it is actualised by being differentiated and is forced to differentiate itself, to create lines of differentiation in order to be actualised' (Deleuze 1988, pg. 97).

5.4 Critique of Vignette 1

From vignette 1, a number of discourses can be identified that shape the ways in which school staff made sense of John and responded to his behaviour. These discourses can be seen as trapped within a possible-real framing excluding the virtual from any actualisation. In this connection, it is highly significant that both John's teacher and TA referred to 'his Autism'. The use of the term 'his autism' places the 'problem' of the disability squarely on John and consequently shifts the responsibility away from his teacher and TA. This is also seen in the statement made by his TA who states that 'he can't help the way he is'. The judgment applied here is that anything John does or does not do is an embodiment of his diagnosis. The practitioners' starting point for understanding the challenges around John's 'meltdowns' (itself a highly charged metaphor) - situates their understanding within the context of the medical model of disability. The medical model of disability suggests that the problems faced by individuals with disabilities are independent of wider socio-cultural, physical or political environments (Brittan 2004). This discourse positions John's disability as being problematic and can therefore be situated within Mike Oliver's (1996) disability as 'tragedy' discourse that attributes the disability solely to the body/mind of the individual in question. Through unravelling the

implications of such medicalised discourse further, a better understanding of the logics of judgement in play within the school setting will be surfaced.

It is also noteworthy that the deficit position taken up in the vignette is one where John's autism becomes *his defining characteristic* with his impairment being the defining factor in how he communicates during times when he has a 'meltdown' (Barnes and Mercer 2003). By situating 'the autism' as John's defining characteristic, a closure is created (defined by an ontology of the actual) that limits his capacity to fulfil social roles and obligations. John and autism become wedded to one another and the 'suffering' he experiences as a result of his 'meltdowns' is attributed to a sensory impairment. As French and Swain (2004) highlight, the term 'suffering' has been widely accepted and used to refer to people's experience of disability. This notion of 'suffering' is also evident in the description provided by John's TA who positions him as a 'poor wee soul'. Rather than being able to look for broader explanations around his communication, John is bound to a narrative of personal tragedy that, in becoming naturalised, limits the scope for an interrogation of practices (Waltz 2012).

There is also a narrative of John being 'complex' which positions him against a set norm which is in opposition to this e.g. normal/typically developing. This therefore makes comparison with an idealised notion of a child and because he does not meet this construction of the idealised subject, he is therefore perceived to be in deficit (Milton 2012). This has an anesthetizing effect and limits the range of virtual possibilities that are available to the staff team. By attributing the incidents to John's autism, the possible solutions and alternatives get trapped within the narrative of John's autism and it becomes difficult to bring in other framings that are not part of the autism characteristics. Shakespeare (2013) argues that there is a 'moral responsibility' to remove disabling barriers in order to create an inclusive environment where people with disabilities can participate in all aspects of social life. John's disability is identified as a limiting horizon that is not open to the virtual. This construction is stuck within a real-possible framing where limitations are set within the construct of pure actuality. Whilst the school staff discussed adjusting the

physical environment, they were enclosed in a discourse of the medical model of disability and therefore were working within a narrow theoretical toolkit that limited their possibilities. Consequently, their narratives focused on what can be read as destructive behaviours that were a result of a tragedy approach to John's disability and its characteristics.

The medical discourses that dominated the narratives around John and the Quiet Room resulted in his teacher and TA defining his acts by applying what might be characterised as a logic of destruction to them. This logic of destruction is limiting since, within its terms, every act is subsumed within a single narrative frame. There is a knotting of autism and destructive behaviour which influences how the adults make sense and respond. Given how these are bound together, it is difficult for the adults to break from these frameworks and apply a more productive logic of judgment.

From the theoretical construct outlined above, the relationship between the real and possible can be identified as the way in which challenging behaviour was understood. The solutions available can be seen as limited due to the way in which understandings of problems are situated within a medicalised framing of Autism. Through the limitations of these framings, what becomes actualised is limited by lack of access to the virtual and instead refracts an already pre-determined image of the world. This has significant implications for John who gets caught up within this framework and the limitations set, contribute to the lack of productive solutions available and consequently the continued distress for him.

5.5 Connecting to New Virtualities

The lines of actualisation that were drawn within the vignettes were limited by the closed medicalised framings that centred on destruction. Due to the dominance of a medical model of Autism within the research contexts, the lines of actualisation were limited by the set of possibilities that could come into play during these situations. If

the virtual is considered not as a way of being but as more dynamic, Virtuality can be seen as the reverse movement of actualisation. In other words, it is a passage from actual to virtual. Virtuality is about discovering a general question to which the entity relates and going towards that question, redefining the starting actuality as the answer to a particular question. Actualisation defines the 'problem' by reference to how things are currently configured and is limited by this horizon when it comes to thinking of ways forward. To imagine what these virtualities might open-up, a wider range of possibilities than can ultimately become actualised. This opening up can be achieved through the adoption of 'becomings' which are best seen as counteractualisations. These 'becomings' are ways in which the already constituted actual world always bears power to become other than it already is. In other words, through the virtual an alternative can be opened-up which provides access to new possibilities thus freeing from the pre-determined framings that may be encounter. To begin to explore an alternative theoretical framework that carves open a different logic, the work of Siebers (2002) provides a useful starting point. It takes a situation stuck within an actualised framing through the destructive lens applied to the act and then through Siebers' re-reading of this through a creative lens an alternative possibility can be actualised. Creation is made possible through a commitment to virtualisation.

5.6 A Creative Interruption

In 1972, on Pentacost Sunday, Laslo Toth struck Michelangelo's Pieta fifteen times with a hammer. During the act he was shouting 'I am Jesus Christ – risen from the dead! He broke the arm of the Madonna in several places, gouged out the left eye and knocked off her nose. The act was viewed in a variety of ways by different commentators. For Redig de Campos, the Director of the Vatican Museum and many other commentators in the Art world, it was seen as an act of destruction with their view that the masterpiece was totally destroyed (Siebers 2002). They called for the statue to be restored to its previous image with the view that it is the only possible way the Pieta can and should look. Similar to ways in which the staff defined John's behaviour, Redig de Campos and saw Toth's act as destructive. Siebers' (2002) creative framing of Toth's act that interrupts the dominant discourse

of destruction and applies a logic of creation that opens up a different possibility. It takes a situation stuck within an actualised framing through the destructive lens applied to the act and then by applying a creative lens the pieta is able to become other. By taking up the idea that Toth's act is creative, he is able to utilise this for his own project. He interrupts the current discourse by proposing that the new image of the statue is actually a disfigured woman opening up the possibility that it can actually be something other than imagined by many commentators within the art community. Drawing inspiration from Siebers, what openings might be achieved by re-thinking the intense behaviours identified as creative instead of destructive? Of thinking of them in terms of 'becomings' rather than 'beings'? It takes a situation stuck within an actualised framing through the destructive lens applied to the act and then by applying a creative lens the pieta is able to become other.

As can be seen from the above example, the philosophy of the virtual is powerful concept as it is not bound up in an already pre-determined image of life and provides space to imagine productive alternatives (Colebrook 2004). It provides a way of enabling a venturing from outside the familiar and reassuring ways of thinking inherent within the school team to take on the invention of new concepts in unknown lands that may generate new understandings of these situations (Allan 2008). The virtual in this instance has demonstrated its creative potential and has enabled Siebers to challenge the construction of the statue by those within the Art world. It therefore highlights its power as a way of innovating. It is this innovative and creative potential that can be tapped into as there is a move towards alternative responses that are more ethical and educational.

5.7 Becoming Creative

Western thought has tended to ignore the virtual power of becoming (which is potentiality or what is not-yet) (Colebrook 2002). To further think through how a creative stance on these behaviours situated within the frame of becomings rather than beings Claire Colebrook's (2004) theoretical construction of dance is a useful framework. It enables a way of thinking about how school staff might respond

differently to John's intense behaviours thus opening-up different ways of responding and communicating with him. Through this access to a way of thinking about the ways in which possibilities located in the virtual may be actualised in order to enable John to become otherwise. It is suggested that by identifying the intense behaviours as a performance, a lens to reconfigure the way in which things are viewed at a point in time can be adopted. Consequently, by identifying with alternative types of performance, an alternative way of proceeding can be adopted that has greater virtual potential.

Colebrook (2004) identifies two types of dance performance, one that is fixed within a certain genre of performance with the performer limited by the constraints around this. She argues that in such a performance, the performer is prejudged based predetermined criteria for the employment of certain way of doing. In Colebrook's alternative reading of this, she suggests that there is a departure from the closures inherent in prejudged performances to one where the act is central, the performer is able to depart from what the performance is to one that is a pure becoming with a focus on what happens in action instead of the end point.

The type of performance that was identified by John's teacher and TA within the vignette produced a very fixed understanding of John and his world. If this performance is understood as a type of dance, it is a dance that is perhaps fixed within a certain genre of performance. The type of dance is limited by this genre and its pre-determined criteria for the employment of a certain style. John's performance is pre-judged on certain criteria and the changes around his environment were attempts to keep this performance within the already pre-determined staging arrangements for such. This can be seen through the way that the TA described having to keep removing things. She did this to retain a particular-fixed framing of the world; this can also be seen by her attempts to create the 'right environment'. The right environment was the environment that she envisaged through her predetermined view of the world rather than that being communicated by the John.

What if John's performances were understood as a motion or an act that is not reduced to some proper form but instead employ a departure from what is to that of a pure becoming? Like with Colebrook's (2004) re-reading of the dancer, John may be seen as losing himself in the 'act'. If this is so then this allows him to become other than himself. By adopting a different lens, John's performance can be understood not as an expression of a potential to produce a destructive outcome but more as a potentiality that is brought into being only as he acts or exists. Colebrook argues that in such a performance, these pure becomings are created and have pure potentiality not limited by a proper end, not limited by what ought to be brought into being nor by a proceeding ground, nor by the form it expresses in which every style of performance has been chosen. If, like Colebrook, the is understood as a body in creation of itself and not as a technique through which creation takes place, with no end or ground outside itself, then a way can be identified through which John's performance can be understood differently.

This is useful in understanding John's responses as it would appear that he is operating through his expression of emotion through his 'meltdowns' whereas the staff team are responding in terms of the pathways of dominant knowledge situated within the medicalised discourses. What if they took up the notion that it was a creative act? Such a shift would create the conditions for a greater array of virtual possibilities to be accessed that may eventually be actualised.

The moment in action, John's becoming, is shaped by the virtual possibilities available to him and these are actualised in the moments of his performance. If, in the virtual, a change in the environment may shift it to a creative space that harvests an array of virtual possibilities - this may enable John to create otherwise. What if the purpose of this room was changed to a 'Creation Room' rather than a 'Quiet Room' or a space to calm down? The virtual potential increases significantly through this change in thinking and enables for a greater range of actualisations. How might this theoretical position, where the virtual facilitates new becomings, provide scope for adopting an alternative view of other situations where intense communication is displayed?

The theoretical framing of the actual and the virtual is, therefore, a powerful tool for educators to draw on in their responses to intense behaviours. By re-framing the behaviour as an 'act' and seeing the child within the construction of 'becomings' as opposed to beings, a creative response is opened up that enables the adult to access a wider range of possibilities that exist within the virtual world. How might this theoretical construction look when applied to a different vignette, what possibilities might it offer?

5.8 Vignette 2

Dominic described a number of situations when he came into conflict with the school's discipline code throughout my meetings with him. The number of incidences was also evident in the number of recoded disagreements he had with both staff and pupils. Dominic had one female friend that he played with every day. However, on one occasion he stated in his diary 'I am not playing with L anymore, I have reported her to the fall out bunch'. He was surprised that two days later 'I feel okay about her now, but she won't play with me at all because I reported her. I would report [her] if she did it again. I will play with L tomorrow'. Further conflict is found with key adults and this is exemplified through a number of statements in his diary such as 'Mrs P was doing Nag nag nag about playing nicely' and 'Mrs P gave me lots of nag nag today'.

While Dominic shared elements of conflict in his diary, greater challenges were outlined by the teacher during one of my visits. She reported that when he got in a 'fuss' Dominic displayed some 'very challenging behaviour'. During the 'fusses' Dominic acted out in a number of challenging ways and did things such as: pulling down wall displays and tearing them up, absconding, throwing items within the classroom (although not directly at anyone), punching and kicking staff members, and generally re-ordering the furniture in the room. Dominic's TA stated that his behaviours 'defied logic and sense' whilst his teacher said that he was a 'troubled child' and the school were unsure what to do next.

In response to these 'fusses' the teacher said that they have had to do a number of things: 'We have had to reduce his time in mainstream class'. This included preventing Dominic from joining the rest of the school and restricting him to the Base only area. As a result of incidents and parental complaints, the school did not want to risk putting him back into mainstream class or playground at present. The school had also resorted to sending him home (exclusion) on more than one occasion due to the impact of his actions on the order and discipline in the school.

As part of his Visual Narrative activity, Dominic had taken a photograph of the foyer area and explained that this was a place that he comes to when he gets sent home by Head Teacher. The narrative below highlights the challenges he has in talking about this space despite identifying it as a key area for himself.

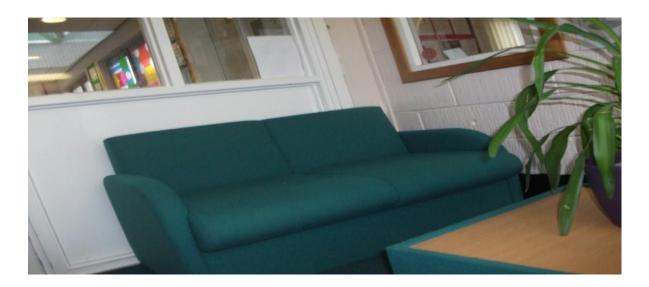


Photo 2. The Foyer by Dominic.

R Is there anything you like about this place?

D I like, I like, I like the plant

R Is there anything you don't like about this place?

D I don't like being sent home by Mrs. X

R Okay, what kind of things do you get sent home for?

D Well

R What happened?

R Do you want to talk about it or would you rather not?

D I would rather not talk about it

5.9 Critique of Vignette 2

Similar to the actualised responses identified with vignette 1, a range of discourses that prove to be closed and counter-productive can be identified. The first of these that is worthy of exploration is the comment by Dominic's TA who said that his responses 'defied logic and sense'. Within this comment the TA positioned the behaviours in such a way that she created a construction of Dominic that limited the virtual possibilities available to her. Her understanding of the behaviour chimed with a medicalised construction of Dominic's disability and the statement can be situated in relation to a discourses of a typically developing child. The response categorises Dominic in relation to normalisation thus demonstrating that her understanding is based on deficit and impairment. This type of response echoes psychiatric constructions of AS which are based on understanding of individual behaviour which deviate from the 'average child' (Ackarsater 2010). By seeing the behaviour as existing outside of rationality, intelligibility and a particular pre-determined social ordering, she inserts a virtual full stop that significantly reduces the virtual possibilities that are available to be actualised. The framing gets trapped in the possible-real plane.

Dominic's teacher also created closures that limit the virtual options available to her. She states that he was a 'troubled child' and this was linked to the school being unsure about their next steps. Additionally, their current responses were limited in scope and this notion of him being a 'troubled child' played out in a series of closed actualised responses as a result of the continued narrowing provided by such a construction of Dominic. In response to his 'fusses' a range of decisions were taken

that were presented as if there was no alternative choice e.g. 'we have had to reduce his time in mainstream class' and 'we have had to remove him from the playground'. Again, the possible-real plane here can be seen as the language used demonstrates inherent closures in thinking.

To rupture the current discourses, access to the wide array of virtual options that may be actualised has to be opened back up. To do this, a small shift in language opens up a far greater choice of virtual responses. By identify Dominic not as a 'troubled child' but instead thinking of his behaviour as 'troubling' then a move can be made from a closed medicalised construction of Dominic to one where the problematic is repositioned towards one where the adults are empowered to generated solutions both from within themselves and also see the options that exist within the wider environment. Such a move promotes a shift away from the problem residing within Dominic to one where the solutions lie out with thus opening up a greater range of virtual possibilities. In this new configuration, professionals can determine how socially acceptable behaviours might be re-shaped.

Similarly, the closures created through the use of the 'we have had to' statements detailed above also get trapped in a possible-real framing. By shifting the language from 'we have had to' towards more creative openers such as 'what can we create' or 'how can we' greater Virtualities are opened up. A shift in language here enables the practitioners to transgress the limitations within their current thinking creating space for solutions rather than the current closures created by their linguistic framing of the problem.

5.10 Conclusion

In this chapter, both John and Dominic found it difficult to discuss situations they had found challenging in school. John was unable to express his feelings in Vignette 1 in relation to the school's Quiet Room whilst Dominic did not want to further discuss the

times when he had been sent home in relation to his photo of the Foyer. It is significant that the children did choose to take photographs of these spaces despite choosing not to discuss their experience in detail. It is also important to note how both John and Dominic's wider narrative was connected to adult narratives that positioned their behaviours as destructive with limitations set on the ways in which they might generate positive solutions. In contrast, Chapter 6 contains vignettes where children share in more detail their interpretation of the sensory aspect of school environments that they had identified.

This chapter also took Deleuze's (1988) theory of Virtuality and put it to work on vignettes extracted from the data set that focused on challenging behaviour. It proved to be a useful tool in challenging the dominant discourses within the actualised framings that opened up a greater array of virtual solutions might be found. It demonstrates the way in which Virtuality as a theoretical tool can offer resistance to current practices and gives practitioners a space in which they can work to generate solutions that are more educational and ethical.

Chapter 6 Reading Acoustic Environments with Michel Foucault

'Sociological listening is needed today in order to admit the excluded, the looked past, to allow the looked past a sense of belonging'

Les back

6.1 Introduction

This chapter sets out to explore first-hand accounts of the acoustic environment provided by children on the Autism Spectrum. It starts out by providing a brief overview of the centrality of the concept of sensory within the Autism literature. Secondly, it looks more specifically at the existing literature on acoustic classroom environments including studies that have looked specifically at children on the Autism Spectrum. Thirdly, a series of vignettes from the data-set are introduced and read through the lens of Foucault. His theory of 'Governmentality' (1979) is used as a tool to problematise the current discourses and to develop a way of rethinking how the acoustic environment might be understood differently for children on the Autism Spectrum.

6.2 Understandings of Sensory for children on the Autism Spectrum

Children on the Autism Spectrum often have associated sensory challenges. Indeed, hyper and hypo-reactivity to sensory stimuli are now recognised as part of the diagnostic criteria within DSM-5 (APA 2013) and also forms part of the guidance provided to teachers and other professionals see Autism Toolbox (Scottish Government 2012). The links between Autism and sensory challenges can be seen across the literature and is exemplified through a meta-analysis of 14 studies by Ben-Sasson et al. (2009) who concluded that there is a higher frequency of sensory-related behaviours for children on the Autism Spectrum in comparison to those who are develop in a neurotypical way. Children on the Autism Spectrum tend to fall into

two sensory groups. Firstly, there are those who are over responsive to sensation and secondly, there are those who are under-responsive and display sensory seeking behaviours. Hyper-sensitivity results in intense feelings and can cause significant discomfort whilst hypo-sensitivity can result in under-responsiveness which may lead to self-injurious behaviour or self-stimulating behaviour (Attwood 1998).

Sensory issues as a key component of Autism can be identified as far back as 1943 when Leo Kanner first described Autism, noting that children were hyper-sensitive to loud noise. 80% of children on the Autism Spectrum exhibit co-occurring sensory processing problems (Ben Sasson et al. 2009) thus making it important to further develop an understanding of it. It is well established that sensory processing patterns often differ from typically developing children and vary amongst children on the Autism Spectrum (Piller and Pfeiffer 2016 and Tomchek et al. 2014). Piller and Pfeiffer (2016) identified that the school environment may for some children on the Autism Spectrum due to the impact of their sensory challenges. Similar restrictions are identified by Ben -Sasson et al. (2013) who highlight that due to sensory sensitivities, some children on the Autism Spectrum avoid some core day to day activities.

6.3 Auditory Sensory

Individuals on the Autism Spectrum are often hypersensitive to loud noises. Stiegler and Davis (2010) highlight that despite children on the Autism Spectrum not possessing any physiological differences with regard to their hearing systems, they none the less feel fearful and anxious about sound and also experience unpleasant sensations due to sound. This understanding can be drawn directly from a number of autobiographical accounts provided by individuals on the Autism Spectrum who highlight the intensity of some sounds over others and also through research observation data. Noise can be particularly challenging for some individuals on the Autism Spectrum if the noise is sudden (e.g. dog barking), high-pitched continuous

sound (e.g. electrical appliance) and multiple sound combinations within busy public places (O'Connor 2015). Hyper-sensitivity to noise can cause significant distress for individuals on the Autism Spectrum. Temple Grandin (1997), an adult on the Autism Spectrum, describes the popping of a paper-bag at close range a as a 'terrifying' experience. Through observations of children on the Autism Spectrum, it has been identified that children make attempts to manage this themselves. Self-treatment strategies include: covering their ears, crying, fleeing the area, humming, trembling and even self-injury (O'Connor 2015).

6.4 Acoustic Classroom Environments

Studies into classrooms and schools as auditory environments have focused on the quantification of steady state noise sources in unoccupied classrooms rather than the potentially more problematic human noises present in classrooms. Teachers and students often report noise can be a particular source of frustration (Erickson and Newman 2017). Klatte, Hellbruck and Seidel (2011) carried out a survey of 487 children across 21 classrooms looking at the impact reverberation had on classroom performance. They found that reverberation had a significant impact on phonological processing, higher burden of indoor noise and children rated peers and adults less positively within environments that had poorer acoustics. Furthermore, in a study looking at a school that had two sides exposed to different volumes of noise, Bronzaft and McCarthy (1975) found that children who were on the noisy side of the school had poorer performance than those placed within the guiet side of the school. They identified a difference of 3 to 4 months in mean reading age between those taught in the quiet area in comparison to those in the noisy area. The authors also sought out the views of teachers who were working in different acoustic classroom environments at primary school level, some situated within open plan classrooms whilst others within cellular rooms that were self-contained. Teachers of larger classrooms not acoustically treated reported greater noise distraction and found communication with students more difficult than children of smaller more enclose classrooms.

Noise studies in schools have generally focused on areas were external noise is the main contributory factor. Researchers have tended to select schools that are located in places close to high levels of noisy transport traffic e.g. aircraft, trains. A plethora of studies exists in this area see e.g. (FICAN 2007; Haines et al. 2002, Matheson 2010) and in relation to this have focused on methods that have scientifically measured noise levels. However, Michael Gallagher (2011) breaks from this tradition and focuses on the role of sound in relation to the exercise of power within school spaces. He argues that despite there often being a focus on discipline and surveillance taking place through the visual, sound also plays a key role and is often overlooked. Through a year-long ethnographic study, he followed a class of children spanning two academic sessions. The children moved from primary 3 to primary 4 during the study with the age of participants ranging from 7-9 years old. Through his observations, he identified the spatiality of sonic power drawing attention to the aural techniques of power used within the class environment. Although, Gallagher's study focused on sonic power at primary school level, it did not specifically look at this in relation to children on the Autism Spectrum.

6.5 Acoustic Classroom Environments and Children on the Autism Spectrum

Shield and Conetta (2015) conducted a survey of 2588 11-16 year olds placed within English Secondary Schools. The findings illustrated that whilst children without additional support needs were impacted by acoustic environment, those with specific barriers such as hearing impairment, English as an Additional Language and those that required Support for Learning were impacted upon more. This is consistent with findings by Dockrell et al. (2006) who in their study of the impact of noise on classroom performance found that noise impacted on all children but in particular those on the Autism Spectrum. Indeed, poor classroom acoustics can create a negative learning environment for many students (Shield and Dockrell 2003) but in particular those on the Autism Spectrum.

Whilst there has been limited attention paid to children on the Autism Spectrum, the research base for children on the Autism Spectrum is even more sparse. In response to the increasing number of children on the Autism Spectrum being educated within schools and the limited research that currently exists, Kanakari et al. (2017) carried out an empirical study to explore the environmental factors that may inhibit academic and social success. Through a survey issued to teachers of children on the Autism Spectrum across three schools, the impact of architectural design was explored. Teachers identified noise as being a key factor for children on the Autism Spectrum and identified a number of environmental adjustments that could be used to manage noise better. The teachers agreed that thick or soundproof walls and carpets were the most important intervention to support children on the Autism Spectrum with the noise. While this study recognises the potential impact of the acoustic environment, it is limited by the methods employed. The study focused its attention on the teachers and did not seek out the view of those the issues of school acoustics impacts upon directly.

In addition to this, Ashburner, Ziviani and Rodger (2008) carried out direct research for children on the Autism Spectrum and in their conclusion made direct links between classroom noise levels and the under-achievement of this group. Similarly, Tomcheck et al. (2014) in their study focused on children on the Autism Spectrum and noise in schools found that children on the Autism Spectrum were more sensitive to excess noise both inside and outside of the classroom and this may lead to individuals becoming distressed, distracted and/or inattentive. The limitations in the existing noise studies for children on the Autism Spectrum is that they have focused on adult observation and reporting. This chapter proceeds by drawing directly on narratives produces by children on the Autism Spectrum providing a different lens through which to understand the impact of noise on children on the Autism Spectrum within school environments.

6.6 Vignette 1

Central to the reading of some environments across the Visual Narratives was the identification of acoustics by a several children. The following extracts from David, John and James highlight the significance of the acoustic environment and provide us with a starting point for beginning to explore this aspect of the childrens' worlds. David's photographs of the Music Room (photo 1) and the Library (photo 2) provide a useful starting point where attention is drawn to the 'sonic rules' that govern each of these spaces. David reads these environments in terms of their sounds and draws attention to the importance of acoustic rules.

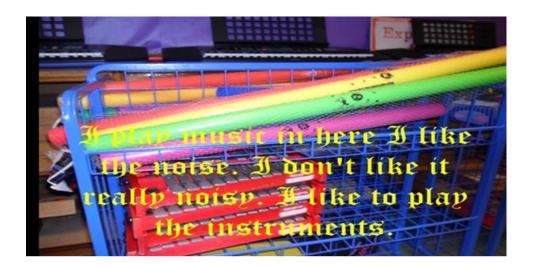


Photo 3 The Music Room by David

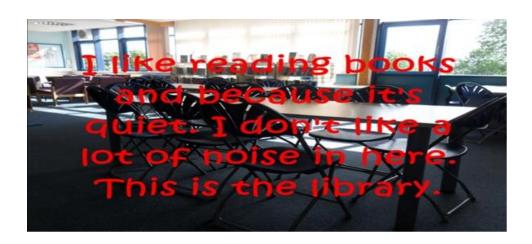


Photo 4 The Library by David

While Libraries and Music Rooms are spaces that are naturally governed by 'sonic rules', John and James draw attention to other spaces and make visible the significance of the sonic within them. Photo 5 and photo 6 are of interest because they were taken within the same school by different children. Given that this space had multiple uses, each child gave a separate account of their experience of this space both focusing their attention on different governing sonic principles. David focused on the lunch routine that took place within this environment whilst James provided an account that acknowledged all activities that took place. Their comments in relation to the photos taken can be found below:

'This is the lunch hall. I go there at 12 O'clock or quarter past 12. What I do here is have my lunch and don't talk. What I love about it is not getting yellow cards or red cards. What I don't like about it is people getting yellow cards and red cards.' John

'This is the lunch hall, we have lunch here and it is also used as the PE hall and the assembly hall. PE stands for physical education, it is like gym except you do all sorts of games in it and in the lunch hall we just eat. Assembly we have to sing, I hate singing and we have to, we get school news we don't have to do anything but we have to sing and sometimes we can have visitors in Assembly and In Song Practice we practise the songs that we sing on assembly and we don't get very much school news on Song Practice, assembly is where we get most of the school news and visitors and in Song Practice we don't get any school visitors. Song Practice is on Tuesday and assembly is on Friday, today, Friday is the day that I am recording this message.' James



Photo 5 School Hall by John



Photo 6 School Hall by James

6.7 Foucault's Governmentality

The vignette draws attention to the sonic power structures that play a dominant role within children's readings of these environments. As a way of starting to make sense of the identification of sonic power structures within the environment, Foucault's concept of governmentality provides a tool that allows us to begin 'thinking otherwise' (Ball 1994, pg. 23). It creates space to problematise the sonic power

structures and provides a way of challenging the taken for granted assumptions identified within the school environment.

Governmentality was developed in Foucault's later work and is broadly concerned with the 'art of government' (Foucault 1979, pg. 7). Foucault (1982) identifies four 'technologies' that are central in helping us to resist the dominant forms of knowledge that emerge from knowledge traditions such as economics, biology, psychiatry, medicine and penology. To resist the 'truth games' inherent in these traditions, the four technologies that Foucault identifies are 'technologies of production', 'technologies of sign systems', 'technologies of power' and 'technologies of the self'. Whilst he identifies that all of these technologies are interlinked and work together within systems of domination, it is 'technologies of power' and 'technologies of the self' he sees as intertwined and as underpinning his theory of 'governmentality'. Foucault (1978, pg. 1) defines 'technologies of power' as form of power which determines the conduct of individuals submitting them to certain ends or domination. On the other hand, he defines 'technologies of the self' as permitting individuals either by their own means or with the help of others to perform a certain number of operations on their 'own body and soul, thoughts and conduct, and way of being' to bring about self-transformation.

Foucault (1978, pg. 1) defines governmentality as the ensemble formed by 'institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power'. It is a coming together of 'technologies of power' and 'technologies of self' to create a network of power. These networks are only concerned with the knowledge of how to rule but also with the organised practices through which we are governed and through which we govern ourselves (Dean 1999). Governmentality therefore is a means of exercising power within networks of different rationalities and technologies, which are shaped for instance by institutions, procedures and tactics (Rose 1999). In these networks the conduct of others is governed, and the self is also governed by a number of self-imposed strategies, it is ultimately the 'conduct of conduct' (Foucault

1991, pg. 48). It refers to the connection between power as the regulation of others and a relationship with oneself; one governs one's own conduct while government guides the conduct of others (ibid). Government is thus acting on the self-government or conduct of people. Government is not natural but is shaped through the technologies of the power and self. These are technologies which individuals, by their own means or by the help of others perform a certain number of operations on their own 'bodies', 'souls', 'thoughts', 'conduct' and ways of being' (Foucault 1982, pg. 1). In doing so, they are able to transform themselves in order to attain a new state e.g. happiness, immorality (ibid).

6.8 Critique of Vignette 1

Through a reading of David's comments on the Music Room and the Library it can be identified that there is a governing sonic structure that David tries to adhere to and in response he employs 'technologies of self' to keep within the confines of these structures. David's comments around these environments take into account the traditional acoustic rules that govern these places and his comments can be read as him setting out to adhere to the 'technologies of power' that take the form of governing sonic technologies. This connection is further illuminated if his comments regarding both environments are compared. Each of his comments is a reflection on the 'sonic conduct' required within each space. He identifies that within the library there is a need to be 'quiet' and states that he does not like 'a lot of noise'. In contrast, he recognises that within the Music Room there will be some 'noise' and in comparing the two he highlights that his 'sonic conduct' is to remain guieter in the library but within the Music Room he can make noise by playing the 'music'. This illustrates a coming together of the 'technologies of power' that govern conduct within these spaces and the 'technologies of self' where David modifies his behaviour within the constructs of governmentality.

John's comments with regard to photograph 5 illustrate the centrality of the way in which the technology of sonic rules is used to govern the school's lunch hall and

exercise management over the children. He highlights that he is expected 'not to talk' and the consequence for this is a yellow or red card. The tactics for ensuring management of the sonic environment is a coloured card which results in some sort of sanction enforced by the staff in the lunch hall. In John's governing of himself, he appeared unsure of what this noise level was as it varied depending on the adult's working within the lunch hall. His response therefore was to impose on himself a set of clearer rules that would guarantee that he would not receive yellow or red cards. His interpretation of these rules was therefore that by not talking, he did not run the risk of stepping outside the governing structures and receiving a yellow or red card.

From John's comments it is evident that he was concerned with an enforcement of these 'sonic rules' by the school's adults within the lunch hall. Indeed, John's solution to the uncertainty around adult enforcement of these 'sonic rules' was to retreat to a position where he remained quiet to avoid the risk of being subject to a sanction. This can be seen as John adopting what was described earlier as 'the conduct of conduct' (Foucault 1991). In response to the governing sonic rules within the dining hall, John has adopted his own set of self-regulatory rules. The sonic rules created normative standards which in turn created the conditions for John to develop forms of self-mastery and self-regulation. Rose (1999) identifies such practices as the pre-requisite for governing free and civilised citizens. Consequently, the school created the conditions for John to form personal autonomy in this area and to develop citizenship which incorporates responsibility for himself. However, this comes at a price with John completely opting out of social conversation due to his concern with breaking the rules. The over-arching technologies of power influenced the form of technologies of control he imposed on himself.

This construct of governmentality replays itself for James as within his narrative he also identifies the interaction between the wider power technologies and the personal decisions he makes to govern his own conduct in relation to this. Through his narrative James identified singing as something he did not like to do. In his

narrative (see photo 6), but goes onto state that 'we have to do it anyway'. The existing 'technology of power' can be once again seen to intertwine with the 'technology of self' where-by John is instructed to sing and despite being unhappy about this he participates anyway by employing a 'technology of self' to keep himself in check. Similarly, like John, the normative standards around song practice created the conditions for James to develop self-mastery and self-regulation around his behaviour and participate anyway, despite his discontent with it.

6.9 Sonic Desirable States

The importance of the governing adult comes through clearly in the sonic rules for each of the environments outlined above and their centrality in exercising the tactics that make up the technologies of power. Whilst the role of an adult was not as explicit in David's narratives, their importance in regard to enforcement of rules comes through in both John and James' accounts. Whilst they never directly identified the adult who was responsible for the exercise of power in their discussions, it was evidently there given that in one instance those not adhering to the sonic rules received yellow or red cards whilst for James, singing at song practice was a non-negotiable activity whether this was something he wanted to do or not. In such systems, Governmentality therefore is a means of exercising power within networks of different rationalities and technologies, which are shaped for instance by institutions, procedures and tactics (Rose 1999). The procedures are the expectation to adhere to the sonic rules whilst the tactics are the enforcement may vary but would include the yellow and red cards given out in the lunch hall. Dominic provides us with a more vivid example highlighting the importance of the adult in enforcing the dominant technologies of power within the governing structures of his school. In response to the photo 5, he made the following comments:

'This is the trim trail. We go here on a Friday afternoon....well only if you have been good of course. If you don't sit quietly and follow the rules then you can't go. It's all up to the teacher, she decides if you have been good or not.' Dominic

Within this example we can see the centrality of the adult in enforcing the codes of conduct. In this instance the sonic rules are part of a wider set of rules. Significantly, Dominic points out that it is the teacher that decides if you have been good or not and ultimately this determines whether he can get to the trim trail. The importance of the adult in identifying the sonic structures within a given environment is highly significant. The work of Brown and McIntyre (1993) is useful in helping to further understand the way in which teacher's influence the school environment.

Brown and McIntyre's (1993) work on Normal Desirable States (NDS) is useful in helping to determine the power teachers have over the school environment. In their study they observed teachers and then followed up by interviewing them regarding their practices. It was through this process they developed their concept of NDS. Significantly, during their interviews, teachers almost always talked about what their pupils were doing. Teachers evaluated their lessons in terms of establishing and maintaining a Normal Desirable State of Pupil activity within the classroom. In other words, the lesson was seen as a satisfactory one as long as pupils acted in ways that were seen by the teacher as routinely desirable. NDS varied between teachers with the NDS of one teacher being quite different from that of another on occasion. This was even the case within lessons with one part of a lesson having a different NDS from another.

Teacher takes measures to control environment

NDS Teacher

Child conforms to teacher's desires

Teacher takes measures to control behaviour

NDS Teacher

Maintaining teacher's NDS is seen as success

Figure 8 Normal Desirable State with Teacher at Centre (concept adapted from Brown and McIntyre 1993)

While Brown and McIntyre's work explored NDS within the context of teachers' ways of ordering the classroom, it did not take into consideration that pupils might have their own NDS that, in turn, influenced their making sense of school experience. What if the attention is instead focused on the NDS of the child? This allows a re-evaluation of Brown and McIntyre's concepts as there is a clear tension between the child's acoustic expectations and that of the adults. By looking at the example given by Dominic, he was expected to regulate his noise level in order to get access to the trim trail – the teacher had the power to decide if he was able to make this standard or not; her NDS would determine whether or not the noise made would be at an acceptable level. This has significant implications which can be amplified by the theory of governmentality as the teacher has control at two levels including the enforcement of the sonic parameters of the sonic environment and also by re-enforcing the conditions that the child must apply to himself. To further explore how this shift of sonic governmentality and NDS, another vignette requires consideration, this time taking situations where children did not find it so easy to conform to the teacher's NDS and the implications this had for teachers' practice. In the following section consideration is given to how this theory of looking at a Sonic

NDS for children on the Autism Spectrum makes it possible to think through some of the situations encountered in this research in a different way.

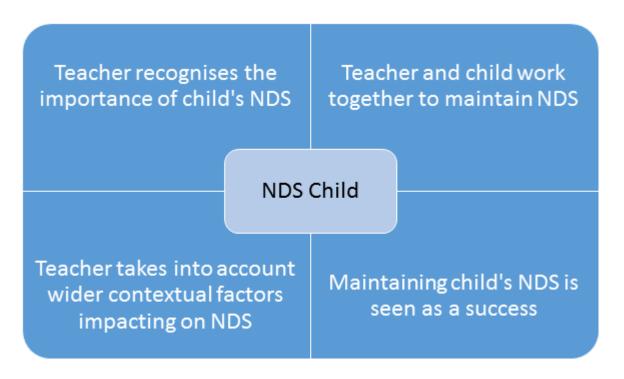


Figure 9 Normal Desirable State with Child at the Centre

6.10 Vignette 2 Acoustic Violence

Prompted by the comments in the photo 6 (above), further exploration of David's sensitivity to sound was carried out through discussions with the class teacher and his mother – this took the form of interview and discussions during visits to David's classroom. Through these discussions it became evident that sound and noise was having a negative impact on David within school and would lead to him at various points in the day running out of the classroom to hide in the toilets where he would refuse to come out, saying that it was 'too noisy'. David's teacher also reported that he would avoid busier areas of the school and that it was a challenge to get him to transition to the lunch hall or to go outside at break time. David's teacher explained that it was a 'big noisy class' but didn't mind it as long as the children were completing the set tasks. She pointed out that she had provided David with a set of

ear defenders but complained that he would not wear them. David's mother also highlighted his sensitivity to noise and felt that it was a contributing factor for him finding school difficult. David's mother stated that she had challenges getting him to leave for school in the morning and that at times he would become aggressive towards her. She made tentative links to the photographs above and also said that he was sensitive to noise at home as well. When it got too noisy at home, David's mother reported that he went into a tent that she had set up in his bedroom. Physical aggression was not seen within the school setting.

Similarly, Fraser found the noise within his school challenging. He made regular comments within his diary in relation to the noise in school such as 'I didn't like all the noise today', 'all the noisy children at playtime'. Fraser's comments retained a similar form throughout his diary with one exception that provided a vivid example of noise within his environment. In one of his diary entries Fraser commented that 'all the shouting during basketball made me scared'. Despite Fraser regularly writing about noise within his diary, he did not make any reference to the acoustic environment during his Visual Narrative. There was a recognition from the school team that he found the school environment challenging and his teacher expressed concerns about his transition to high school that was imminent. His teacher identified that when the classroom was 'very noisy', Fraser found things more challenging. He reported that when he noticed a change in Fraser's body language, he would send him a message or recommend that he went for a walk. While the teacher was proactive in spotting the signs and supporting him in class, he also noted that Fraser would seek out quiet spaces within the playground away from the central areas.

6.11 Acoustic Violence

Given the impact the acoustic environment had on both David and Fraser, the concept of 'acoustic violence' is useful in capturing the significance of this. The term acoustic violence was coined by Frederico Miyara for use at the First International Multidisciplinary Conference on Acoustic Violence in 1996. While the principles of acoustic violence have been recognised and understood for a long time, Miyara provides a definition that is useful in helping us to understand the significant impact the sonic environment had on David and Fraser. Acoustic Violence can be defined as violence exercised by the means of sound and this could happen through a range of mediums including a loud noise, neighbours' music going through a wall or the constant hum of a busy city late at night, disturbing sleep (Miyara 1999). For Miyara, the violence may not have been caused intentionality, but it can nevertheless occasion damage, hurt, unrest or even harm. Indeed, sound can be a powerful weapon and there are occasions and situations that it can be used to intentionally cause harm. Hill (2012) outlines the way in which 'sonic torture', an act of violence using sound, has been used as a method of causing harm and distress in prisoners to increase their cooperation. While the extremes of 'sonic torture' may not to be found in school settings, noise pollution is often described as 'torturous'. Indeed, Hill (2012) argues that of all the torture methods, those that have been exposed to 'sonic torture' have described this as the worst of all methods. Acoustic violence therefore, whether intentional or not, is a useful concept to support an understanding of the severity of David's and Fraser's experiences given the negative impact that the acoustic environment had on them.

This concept of acoustic violence is helpful as it also helps to reposition the phenomena situating it beyond the individual allowing for consideration of a greater variety of sources. It facilitates a shift from the sensory system situated within the child as being the main driver of the distress for children on the Autism Spectrum towards one where teachers, other professionals and the external environment must be acknowledged as making a substantial contribution to the situation.

6.12 Sonic NDS and Acoustic Violence

By taking a critical look at photograph 2 and applying the inverted concept of NDS, as potentially applying to children as well as adults, and as specifically focussed upon sound, it enables a way of reading David's working definition of his NDS within this environment. What he defines is what he sees as just the right amount of sonic control over his environment. It would appear from his comments that David likes noise but not too much of it and he also likes playing the instruments. At this time, David's NDS does not construct noise as entirely negative: he also sees a positive aspect to this too. While he is able to outline his ideal balance here, it is evident from other sources of data that when there is a conflict between David's acoustic NDS and the NDS of others, he finds this challenging. This comes through in his some of David's responses within the classroom to the noise level. In the vignette, his teacher shared that he took himself to the toilet and hid when it was 'too noisy'. There is a conflict between the NDS of the teacher and other children and that of David. It would appear that David was experiencing a form of acoustic violence whilst it can be assumed that his teachers and peers appear to have a sonic NDS that was able to manage this space.

The teacher situates the sonic NDS issues as lying within David and does not consider that her own NDS and that of the other pupils should be questioned. Consequently, she imposes her own tactics of sonic power on to David, she does not consider other factors within his sonic environment but instead orchestrates an intervention that focuses only on him. His teacher had expressed her frustration regarding the fact that David would not wear the ear defenders issued to him. The introduction of ear defenders for David to wear was an attempt to redefine the sonic for David not by focusing back on her own sonic practices but by using her power to regulate David so he could regulate himself. Due to the levels of distress that David was showing when I was in school, I volunteered to work with him to try and support him in regulating the noise level. Similar to the teacher, I focused the issues as lying within David and did not question and evaluate the idea of NDS and noise factors situated out with the child.

In working with David, I focused on developing alternative solutions to the ear defenders that the teacher had given him as a way to support David in self-regulating the noise he found challenging. Through discussion with David, he was very clear that he did not like these. When I raised the issue he had highlighted in the narratives with the class teacher, she casually suggested that we should get him a pair of ear defenders. However, rather than going straight to the solution, and in keeping with the voice component of this study, I met with David to explore further his views around these noises and to try and establish new practices that would make school a better place for him. To have just handed him ear defenders would have demonstrated an approach that did not recognise his subjectivity. From previous work with David, I recognised that open questioning would make him anxious so I came in with the visuals from the data and a list of potential solutions to be used as starters and visuals. We firstly explored the ways in which the girls could reduce the amount of noise they made – from being in and around the class I recognised that this had been an ongoing challenge for the teacher too. A range of options were discussed and in the end David decided that he wished for his views on the girls to remain private but continued to say that he didn't like the noise. Secondly, we then explored what he could do about the noise. When I asked him more about the ear defenders he said that he thought they were 'not cool' and was worried about 'the other girls and boys looking over at me'. We discussed the possibility of ear plugs at this meeting and he agreed this might be a good idea - I arranged a follow up meeting with him once they arrived to show him them and check that he would have been happy with them. Unfortunately, he was not keen on them but did then say he could wear 'wee music headphones like A (big brother)'. We had a look on the internet and managed to identify a pair that he thought looked 'cool enough' and an order was placed. Once he had them for a few weeks, I followed up with him again. David said that 'I can't hear the noisy girls so much'. His teacher also reported a perceived reduction in anxiety and not being faced with David leaving the class and refusing to come back in from the toilet as much as previously. David's mother likewise reported to the class teacher that things had improved in the morning but they were not perfect.

Reflecting upon this piece of work, I am now concerned that by not asking wider questions and focusing only on David, my practice of persuading David to develop a new strategy that focused only on *his* change can perhaps be seen as what Gallacher and Gallagher (2008) describes as a way of David participating within his own subjection. However, these power structures around self-regulatory behaviour involve a versatile equilibrium which is both compliments and conflicts between imposed coercion and the processes through which the self is constructed or modified by himself (Rose 1999). The skill to regulate his own conduct around sound had positive outcomes for David and he was able to find ways to remain with his school and class environment moving forward. He was able to regulate his own conduct. For David, the ability to govern himself, governmental power equips him to become an independent actor, no longer so beholden to externally imposed regulations. However, consideration should be given to teacher NDS moving forward so that responsibility for the sonic environment does not lie only with David.

The opening provided by reading the tensions between governmentality and the NDS of children on the Autism Spectrum is a powerful tool. It has opened-up the conflicts between the NDS of teachers and the school environment and the ways in which is clashes between the NDS of children on the Autism Spectrum. Whilst this was applied to David's vignette, it is worth further exploring how this looks at a theoretical combination for exploring Fraser's experience.

This tension between NDS of the children in the study and others can be seen within the context of the PE lesson described by Fraser. From Fraser's diary entries and those who knew him best, it is understood that he preferred quieter environments. From this, links can be made between Fraser's preferred NDS which was an environment that he perceived not to be overly noisy. Fraser's description of how he felt during the basketball session can be understood using the theory of governmentality and NDS. The governing rules and established normative

conditions for behaviour during the competitive aspects of a PE lesson differ considerably from more conservative activities such as reading. In PE, he is subject to an acoustic environment that he had no control over and the NDS of the classroom is dictated by his peers who were shouting during the basketball game. Fraser's NDS for this area different from that of the PE teacher and his classmates with the competitive aspect.

Similar to David's experience, it can be seen how the NDS for Fraser within the sonic classroom environment differed from the NDS or the teacher and his classmates. The teacher's choice was to regulate Fraser. The classroom network of power becomes clear as the teacher governed the conduct of Fraser by identifying when he required to leave and subsequently Fraser complied with this by leaving when asked. This is consistent with the way in which Dean (1999) constructs governmentality as he sees this as the organised practices through which individuals are governed and how they in turn govern themselves. It is evident that the teacher in the configuration above does not raise questions about his own NDS but instead situates the problem with Fraser. His NDS is supported by his 'will to govern' and he uses the practices within the class to regulate Fraser's behaviour rather than his own or that of other children. His responses within the context of his classroom are made with the good intentions but consistent with government in general, he is acting in a way to affect the way in which individuals conduct themselves (Burchell 1996). By centring the concept of NDS on the child, this may lead to a reconfiguration of the choices available within practice.

6.13 Conclusion

This chapter has taken first-hand accounts of the acoustic environment provided by children on the Autism Spectrum. It has highlighted that some children on the Autism Spectrum, such as David, read their environments in sonic terms and this has important implications for how children within this population might be

understood. By using Foucault's theory of 'Governmentality', traditional constructions of how children on the Autism Spectrum are understood is interrupted and a revised theory of NDS is presented. It suggests a shift from understandings of NDS within education that focus on the teacher to NDS that is centred on the child. By making such a shift, an alternative framing of the sensory environment can be developed that creates space to work with the child to develop solutions rather than situating the blame as part of the child's 'disability', 'condition' or 'impairment'.

Chapter 7: Conclusion

"When we change the way we communicate, we can change society"

Clay Shirky

7.1 Introduction

The purpose of this chapter is to draw conclusions around this research study. Firstly, it aims to summarise the research highlighting the way in which the research questions outlined in chapter 1 were met. It does this by revisiting both part 1 and part 2 of the thesis and situates the study within the wider body of literature. Secondly, there is an exploration of the limitations of this research illustrating the shortfalls of this study and highlighting the ways in which this research may be subject to critique. Thirdly, a critical discussion is undertaken outlining the implications this research has for current policy and practice. Finally, a set of recommendations for future research are drawn out identifying further gaps and openings to be addressed in future.

7. 2 Summary of Research Part 1

This research set out to address the current gap in the research literature where there has been limited attention paid to the voices of children on the Autism Spectrum. French philosopher Jacque Ranciére (1999) was used to situate the exclusion of this group and consequently, children on the Autism Spectrum were identified as a 'policed group' within his framework. This was illustrated through the way in which children on the Autism Spectrum had been generally been excluded from research with studies done 'to' rather than 'with' them (Humphrey and Lewis 2008) and a policy framework that valued neoliberalism as opposed to social justice. It was identified that within a Scottish context, there is a disconnect between the rhetoric of policy which presents the inclusion of all children within a mainstream context as an ideal as opposed to reports such as those found within the media that portray the inclusion of learners on the Autism Spectrum in mainstream as complex and problematic (Ross 2018). Despite this, there is an absence of the voices of

children on the Autism Spectrum from these discussions and therefore this set out with a political purpose of providing a platform to enable these silenced voices to be heard.

To take-action against these injustices, Ranciére's construction of emancipation found within the Ignorant Schoolmaster (1991) was used to critically question traditional understandings of emancipatory research, to open-up space for an approach that was critical, ethical and experimental (l'Anson and Jasper 2017). Ranciére retelling of the story of pedagogue Joseph Jacotot problematises the relationship between master and student, highlighting the inherent inequality that arises from explicatory models of teaching. In this explicatory model, the student is always in deficit and will always be reliant on a master. As a response, Ranciére argues for a re-definition of this relationship by suggesting that equality should be axiomatic and thus be automatically a given within any relationship. It is on this basis that he constructs his emancipated subject and through redefining the relationship between master and student, taking equality as a given rather than a gap to be closed, emancipation therefore becomes possible. However, despite the promise of Ranciére's alternative configuration that was for 'anyone and everyone', it was limited by its narrow construction of a rational speaking subject. It was argued that this therefore excludes those who do not use speech as their primary method of communication. Through the critique provided, this research moved beyond Rancière (1991) and outlined ways to think beyond his construction of the child as a rational speaking being.

This gave rise to the development of a social justice framework based on 'diversity' rather than 'deficit'. Within the context of social justice driven research that valued 'diversity' and sought to include all, it was argued that a shift from 'voice' to 'communication' was necessary; this broadening allowed for the inclusion of children on the Autism Spectrum who would otherwise remained 'silenced' (Bogdan and Biklen 1998). This highlighted two important points moving forward. The emancipatory potential of Ranciére's work that has gained traction recently (see Bingham and Biesta 2010; Hewlett 2010; Magnusson 2014; Woodford 2017)

requires a reconfiguration if it is going to be truly emancipatory. It is argued that this can be achieved by understanding the subject in terms of 'communication' rather than 'speech'.

A barrier to directly attending to how children on the Autism Spectrum communicate has been the lack of tools at the disposal of researchers and also the fact that some researchers find the prospect of working with children who do not communicate in traditional ways daunting (Kirby 2015). This was taken on in chapter 3 and the methods developed were founded upon 'communicative competence' rather than 'communicative deficits' framed through a re-reading of medicalised constructions of AS by researchers situated within Critical Autism Studies such as Damien Milton and Richard Wood. Drawing upon the communicative strengths of children on the Autism Spectrum identified within the research literature, a visual starting point was adopted. Through this, Visual Narrative and Diaries (adapted for individual communicative preference) were adopted as the primary research methods and these enabled the participation of all children in this study due to the flexibility they offered and the broad construction of communication underpinning them.

Visual narrative was a useful way of engaging the children participating in the study in the research activities. The use of cameras provided a way to facilitate access for all children and was something that they were all able to use. Furthermore, the broad range of communicative methods available within the Photostory, provided all children with the opportunity to share their story due to the flexibility in communicative functions on offer. Equally, the use of research diaries also proved to be powerful and through the adjustments provided for each individual child, space was created for children to share their day to day experiences. This allowed some powerful stories and issues to come to the fore that would have otherwise been missed e.g. Fraser being frightened during basketball due to the noise.

The use of video diaries also emerged through the work between a child within this study (John) and his class teacher. Video diaries proved to be a powerful tool for

accessing John's voice and despite its limited use within this study, it highlighted great potential that have yet to be mined. Video diaries may offer an insightful way to engage with children who find traditional social interaction challenging. In addition to the development of methods, this research was also explicit about the process of communicating with the children in doing this research. It is hoped that this will make the task of engaging with such groups less daunting and provide others with the confidence and motivation to follow suit.

7. 3 Summary of Research

The second part of this research was concerned with reading and analysing the data. A significant challenge was dealing with the diverse data set that had been produced as a result of being open to individual communicative preferences. In response to this challenge, a decision was made to use Thematic Analysis (TA). The structure of TA analysis was a useful guide to work through the analysis given the diversity of the data set produced. The concept of mapping as opposed to tracings (Deleuze and Guattari 2001) was used to capture the dynamic aspect of the data analysis process shifting it from a rigid step by step process to one thought of in terms of 'entry points'. Such a shift in language reflects the reality of the data analysis process and captures the dynamic and fluid way in which I worked. The metaphor of 'tracings' and 'mappings' provided a way of problematizing the rigidity of the step by step process within the traditional TA framing. 'Tracings' reflect the rigidity of a step by step process and exist within a pre-determined framing of the world creating blockages and impasses. Mapping, on the other hand reflects multiple 'entry points' and produces a way of working that enables a zigzagging back and forth between stages allowing movement through the impasses and blockages.

The TA was read within an over-arching post-structuralist framework drawing on the philosophers Gilles Deleuze and Michel Foucault. These philosophers provided toolkits that problematised the thinking found within each of the research contexts. This provided a way of thinking about the logics of judgment employed through routine practice and created a space through which alternative could be developed.

Both philosophers provided ways of resisting the neurobiological constructions of the child on the Autism Spectrum and provided ways to think otherwise. The space created allowed for a rupture in the current understandings of Autism and demonstrated the power of theory for creative and imaginative thinking. By drawing on these philosophers, a much deeper reading of the data was achieved and allowed for storybook themes to develop.

To present and analyse the data, a series of vignettes were drawn up. Central to the vignettes used in Chapters 5 and 6 were the first-hand accounts provided by the children. Critically, within Chapter 5, the children who identified challenging situations found it difficult to express themselves and despite initiating around these challenges either did not want to or could not want to expand upon these. This was seen in the deflections used by both John and Dominic within their Visual Narratives. In contrast, the narratives situated within the Vignettes in Chapter 6 were much fuller and children displayed greater confidence and willingness to expand during photo elicitation.

In chapter 5, the narratives drawn from the data set were consistent with existing findings from research within the area of challenging behaviour and were in line with those shared by authors such as O' Nions et al. 2015 situated within the literature review in chapter 1. Similar to these researchers, behaviours were identified that included self-injury, absconding, aggression, property damage and social conduct that was categorised as inappropriate. However, the understanding of these behaviours is problematised in this study and read in a way that differs from traditional research underpinned by a medical model of Autism. The Deleuzian concept of Virtuality (1988) was used to interpret the data and created a space for a reading the behaviours shown by the children in the study that went beyond the difficulty being exclusively the providence of the individual. By drawing upon an ontology of the virtual, this allowed for a shift in thinking around how these behaviours were understood and facilitated the interruption of the dominant ways of attending to these behaviours. This reconfiguration allowed a reframing of how challenging behaviour might be understood and understood differently. Such a

reading is more consistent with readings of Autism that favour neurodiversity rather than neurobiological explanation.

In chapter 6, a significant finding from the data set was that some children understood their environments in terms of their acoustics. Despite the employment of methods that were visually dominant, it was a significant that many turned to the auditory for understanding. Links can be made between these findings and neurobiological understandings of sensory processing. In particular, connections can be made to studies by Tomcheck et al. 2014 and Stiegler and Davis (2010) who identify the way in which children on the Autism Spectrum are sensitive to their acoustic environments. However, the research in this area to date has been primarily focused on observation and has not attended directly to child's voice. Through methods that enabled children to communicate directly, it is highly significant that an acoustic emerged with regard to how spaces were interpreted. The direct use of children's narratives brought to life the current acoustic sensitivities demonstrated by the children taking part in this study. Some of the narratives produced are very powerful and illustrate the challenges for some children. In particular, the day to day challenges for David and Callum capture just how difficult the school environment can be for some children on the Autism Spectrum.

Foucault's (1979) theory of governmentality was employed in chapter 6 as a way of drawing attention to the sonic power structures that operated within the narratives. It provided scope to problematise the children's sonic readings of the environment and enabled a way of challenging some of the taken for granted assumptions about the sonic environment. This was drawn out through the work of Brown and McIntyre (1993) who through teacher interviews, identified the Normal Desirable State (NDS) for teachers who sought control over all aspects of their environment. However, Foucault's theory of governmentality allows space for a different reading and shifts attention from the adult and places the child at the centre.

7.4 Relationship to Previous Research

This research can be situated in the body of work that is attentive to the voices of children on the Autism Spectrum. It can be positioned alongside work by Preece and Jordan (2010), Hwang (2014) and Humphrey and Lewis (2008) who saw value in and worked with children on the Autism Spectrum to ascertain their views. This study offers an original contribution to knowledge both in terms of the methods employed and the group in relation to which these methods were mobilised. The methods employed in this study had been used in other contexts with children on the Autism Spectrum. Carrington et al. (2007) and Ryan (2008) both used a Visual Narrative for working with children who were either on the Autism Spectrum or more broadly identified ASN. However, this study employed these methods within a Scottish context and provided an account that demonstrated sensitivity to individual communicative preferences. It also broke from these studies who drew out the views of children within a framework of 'voice' while this study focused on the broader term of 'communication' thus increasing its inclusivity.

Similar to Humphrey and Lewis (2008) this research employed the use of research diaries with individuals on the Autism Spectrum. Whilst this research also drew upon this method, the Humphrey and Lewis study was conducted with children of secondary school age in an English Context. Humphrey and Lewis' research illustrated the effectiveness of diaries for ascertaining the views of children on the Autism Spectrum. However, this study highlighted that this method could also be used with younger children and was an effective tool within a Scottish Primary School context. In comparison to existing research, this study further problematises voice as it extends the category to communication thus opening-up the category of what is being attended to. Not only does it broaden this category but in reading the data it also further seeks to challenge a mere replication of what was said and what happened. By adopting the use of Deleuze and Foucault, a way of reading the narratives that enabled space for challenging current constructions was provided.

7.5 Limitations of Research

In retrospect, it is possible to identify a number of limitations with this research. One such limitation was the gender balance of the children taking part in this study. Whilst it was identified at the outset of the research that a gender balance was desirable, I was unable to gain access to school sites that had girls on the Autism Spectrum. Consequently, this resulted in the sample being limited to boys only and therefore the data set was dominated by male voices. During the initial phases of this research I was frustrated by failed attempts to gain access to schools that included girls on the Autism Spectrum. I worked closely with Speech and Language Therapy during the initial planning phases of the study but despite their support, I was unsuccessful in gaining access. There continues to be a research gap attending to the voices of girls on the Autism Spectrum at all levels, despite this having gained more traction and attention recently see Attwood (2013).

This research has been primarily concerned with children on the Autism Spectrum who were accessing mainstream education. By keeping the focus on those who were in mainstream only, it excluded other children on the Autism Spectrum not attending a mainstream school. In the initial review of the literature, it was identified that children on the Autism Spectrum had routinely been excluded from research studies due to the lack of tools for accessing their voices. In particular, they had been excluded as a result of not fitting within traditional methods such as interviews. From accessing research sites that had units attached to them, a high proportion of children did not meet the criteria set for accessing the study due to this requiring at least 50% in mainstream class. Consideration within future research studies could be framed around this group. Retrospectively, this research may have taken a different direction if the criteria had been opened up beyond attendance in mainstream.

This research was also limited by the methodological toolkit available as a professional doctorate student working full-time whilst undertaking this study. As a result, the time I was able to spend in the research community was restricted. At the

planning stage, I saw great potential in ethnographic approaches which would have afforded me the opportunity to immerse myself in school culture and build deeper more meaningful relationships with all within the research community. Despite identifying this as an idea, it was impractical due to the other commitments I had in my own school. Additionally, there was no scope or funding to be released from my post to take forward a project in this way. Ethnographic approaches, with longer time on site, offer potential to allow a greater array of voice tools to be explored and co-created in an experimental way.

7.6 Implications of Research

7.6.1 Implications for Policy

One of the original aims of this study was to address the absence of the voices of children on the Autism Spectrum within educational research. It was highlighted through the literature review that there had been a limited amount of research that had attended to the voices of children on the Autism Spectrum. Consistent with the research traditions utilised with other minority groups within education (e.g. children with SEBD and younger children), the methods and methodologies employed have remained within a tradition that attends to 'voice'. The term voice as it is found within research values a rational speaking being and this is refracted in both policy and research practice. As a result, current research employs methods that are consistent with rational beings and the notion of 'voice' is replicated across policy, research and practice.

This study challenged this construction of 'voice' in chapter 2 through a critique of constructions of emancipatory education and research. Through the use of Ranciére's (1991) Ignorant Schoolmaster, traditional constructions of emancipatory education were challenged through the radical alternative he offers. This radical alternative is founded upon an 'equality of intelligence' which Rancière (1991) argues is for 'anybody and everybody'. Through a critique of his critique, I have argued that despite the promises of Rancière's framework, it limits the participation of those who

do not use speech as their primary mode of communication. In response to the limitations identified within this framing, a move from the term 'voice' to 'communication' is argued for. Such a move is instrumental as it opens-up space to include individuals who communication in non-traditional ways.

By working with the term 'communication', a space that valued individual communicative strengths was created. Whilst this study took the visual as a starting point, it did not set a boundary around this and worked with the children and community in development and adjustments of research methods. This is illustrated through the diversity of communicative preferences that were attended to within the study including the flexibility of the framing to engage with video diary. This research has demonstrated the inclusive power of making the shift from 'voice' to 'communication' as it created the space to open up thinking with regard to how to attend to children who may not sit comfortably within current framings. A re-framing of the policy framework at all levels to place value on 'communication' rather than 'voice' would have inclusive potential for all children rather than the privileged few that sit within current narrow constructions of voice. This would enable a bridging of the gap between strong policy drivers that are in favour of attention to children's voices which are framed in a narrow way (see chapter 3) and inclusion policies that are framed as being for all.

7.6.2 Implications for Practice

Researchers

The research initially placed Ranciére at the centre of both the framing and the analysis. This decision was originally predicated in response to previous work by Julie Allan (2008) in the field of Inclusive Education who had drawn upon Foucault, Deleuze and Derrida. I had aimed not only to bring the voices on children on the Autism Spectrum to the fore but also to add further philosophical tools through the introduction of Jacques Ranciére to the field of Inclusive Education. Ranciére's (1999) theory of policed/poltical was useful for situating children on the Autism Spectrum as a policed group and for identifying the requirement for politically driven research to challenge the current place they have been allocated within the social ordering.

Despite the initial promise of Jacques Ranciére, his theories did not provide the correct tools for developing a theoretical framework nor for reading the data set. Given the visual nature of this research, I tried to connect with Ranciére's The Politics of Aesthetics (2006) and The Emancipated Spectator (2011) drawing parallels between the visual nature of this research and the focus on Art within each book. However, following many forced attempts to reconcile my data set with the work of Ranciére, I decided to look elsewhere and by putting the data at the centre rather than the philosopher, I was able to identify the correct philosophical tools for the job. I turned back to the path that Allan (2008) had followed, by looking back in at the philosophical tools of Gilles Deleuze and Michel Foucault. The tools I pulled from their boxes enabled a way of engaging with the data that provided space to re-imagine a different way of engaging with children on the Autism Spectrum. This research once again highlighted the power of Deleuze and Foucault in Inclusive Educational Research.

Schools

The work of Foucault (1979) was employed in chapter 6 to illustrate the ways in which sonic technologies were used to exercise power. Through this framing, auditory sensory issues were understood through the privilege lens of the teacher. This dominance of the teacher's lens was connected to previous research by Brown and McIntyre (1993). In their work, they identified that teachers seek out a Normal Desirable State (NDS) which the success of a lesson is hinged on. The teachers they interviewed saw their lessons as successful dependent on whether or not pupils acted in a way that was routinely desirable. However, by taking up the direct understandings of the environment from the child's perspective, an inverted theory of NDS was established that placed the child rather than the teacher at the centre of the narrative. This has important implications as within this new configuration, teachers, if they claim to promote child-centred practice, need to think beyond their own NDS and place the NDS of children at the centre.

This revised theory of NDS offers a useful starting point through which practitioners could challenge their practice. Within a Scottish context, the Standard for Full

Registration (GTC Scotland 2012) an aspect of the mandatory requirements for a teacher is that they will engage in reflective practice. NDS provides a useful tool for reflection that places the learner at the centre of the teacher's thinking. It provides a framing that allows the teacher to think beyond their own experience and to start to explore the wider complexity going on within the classroom environment. Instead of working within traditional understandings of NDS which focuses on the teacher's state, the revised theory of NDS offered here allows a shift in this thinking with the teacher and child working together to maintain the NDS of the child. While this approach has value for all children, it has significant implications for children on the Autism Spectrum who may also be experiencing sensory challenges. The framework offered provides a way of thinking through these challenges in a way that respects the difficulty faced by the child. It may provide the basis of a problem-solving toolkit to begin to think about sensory challenges within school settings.

Deleuze's theory of Virtuality was harnessed within this research as a way of accessing a creative space to work through situations were an impasse has been reached or exists. This was achieved through the use of 'creative interruption'. Siebers (2002) article 'Broken Beauty' was drawn upon as it re-framed Laslo Toth's attack on Michelangelo's Pieta. The attack was seen as a destructive act by the Art community but Siebers' had re-framed it as an act of creation and one where the newly created disabled form should be celebrated.

The use of creative interruption is a powerful practical tool to enable a move beyond the possible-real plane and access new spaces of Virtuality where ideas and solutions can be created and then actualised. Beyond this study, the use of this framing has had a positive impact in professional practice. In my current role as Head Teacher, I have been actively working with my Leadership Team to identify and use a range of creative interruptions to enable our school team to access spaces of Virtuality and thus create the conditions for facilitating a more ethical reimagining of what had existed before.

A powerful example of this can be found in recently work with my staff team on reframing the school vision and values. Within my initial work with the staff team, it was evident from the information generated during our collegiate working sessions that the team were stuck within the possible-real plane. There was simply a reflection of what already existed rather than a space to generate a new way of thinking about and creating new possibilities about how things might be different. My Leadership Team and I initially saw the situation and entrenched and hopeless. However, by reflecting upon my own research and connecting with the concept of Virtuality, we were able to re-think our approaches and open-up new spaces for thinking. In response, we set up a task based on the knowledge I had generated on 'creative interruptions' and their usefulness in accessing spaces of Virtuality. The staff team were tasked with creating photo collages drawing upon photos of people, things and events that either inspired them to become educators or that currently inspire them as educators. This task proved to be successful and generated powerful discussions with lots of openings allowing us to move passed the closures inherent in our first attempt at this. Staff were able to reconnect with their own histories and inspirations and in doing so opened-up a space to re-imagine a new more ethical vision for our school.

In summary, the theoretical tools provided by the Deleuze (1988) and Foucault (1979) enabled a reading of the data that problematised the closures inherent within it and opened-up new ways of thinking about the challenges that were encountered. These theoretical constructions were demonstrated to have significant power and enabled a series of openings to be created within the discourses both within research in the area of Inclusive Education. Beyond this study, the work of Deleuze (1988) has been useful to me within the context of school Leadership. In terms of future practice, these philosophical ways of thinking provide space to open-up thinking in situations across the educational terrain.

7.7 Recommendations for Future Research

Whilst this research has addressed the existing gap in the research for children on the Autism Spectrum, there are nevertheless further issues that have been identified within this study that could be addressed in future. Future research that puts the child at the centre and constructs things in terms of communication as opposed to voice would have emancipatory potential. The inclusive potential of this framing has benefits that extend beyond children on the Autism Spectrum and has implications for research with other minority groups (e.g. girls on the Autism Spectrum, children with SEBD and younger children). Research with children and the extant method and methodologies that are employed, value voice that is understood in terms of rational speaking beings. By expanding the category to communication, future research in education could be opened-up in a much broader way in terms of the methodologies employed and the range of accepted methods for engaging with children.

As discussed above, an interesting finding within this research was the way in which sound became central in a number of the narratives produced to the children. This ran in contrast to the framework developed that was founded upon the visual. Given that this outcome was identified within a visual framework, future lines of enquiry should give consideration to developing frameworks that centre on acoustic environments whilst continuing to attend to the voices of children on the Autism Spectrum. This has the potential to further problematise the knowledge about sensory constructed from autobiographical accounts of those with Higher Functioning Autism (HFA). While the children's reading of acoustic environments was identified as a key theme that was reported on, this indirectly emerged from the open and experimental framework rather than being something specifically probed. Future research that aims to attend to this offers a space for developing new methods and methodologies which will enable further understandings of the sensory environment for children on the Autism Spectrum to be explored.

Since the time of carrying out the field-work component of this research, there have been many developments within technology that offer more potential than the tools drawn upon within this study. In conducting the visual narrative in this study, the main tools that were used were cameras and Microsoft Photostory. However, with the recent developments in portable digital technologies and apps, there is much potential to further develop research methods and methodologies centred upon these as they are resources that many children and young people are now actively motivated by and engaged with. In recent years, the increase in the availability of smartphones has facilitated ways of enabling improved communication for some children and young people on the Autism Spectrum. Julia Bascom (2019), director of the Autistic Self Advocacy Network has highlighted that the explosion of apps available has provided a new platform through which children on the Autism Spectrum can express themselves. She points out that 'smartphones have opened up a door to a whole new world'. The promise that this new world offers must be taken up by educators and researchers as they strive towards facilitating a better experience for children on the Autism Spectrum.

7.8 Conclusion

This chapter set out to bring this research to a conclusion. It started by summarising the work that has taken place in both parts 1 and 2 of this thesis. It then proceeded to situate this study within the wider body of voice research, highlighting that this research made an original contribution to knowledge by addressing the absence of autism voice in primary school research. Despite this research addressing this gap, a number of limitations were highlighted including gender imbalance, the exclusivity of the sample (accessing mainstream only) and the methodology. Following this, the implications for policy and practice were drawn out. The implications of shifting the policy language from voice to communication was explored, illustrating the inclusive potential in this idea. Furthermore, the power of the NDS framework in chapter 6 was discussed identifying this as a useful way of problem solving for teachers.

The chapter concluded by identifying the direction future research in this field. The acoustic readings of the visual environment were identified as a powerful opening

that researchers may follow. Sonic research that attends directly to the voices of children on the Autism Spectrum would be a valuable contribution to the field. Finally, this chapter highlighted the developments in digital technology and recognised the potential these have as tools for attending to the voices of children and young people on the Autism Spectrum.

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Appendix 1 Digital Copy of Ethics Form Submitted

****PLEASE COPY THIS FORM ONTO YOUR OWN COMPUTER PRIOR TO COMPLETION*****

RESEARCH PROJECT REQUEST FOR ETHICAL APPROVAL FORM For all SoE Staff and Student projects



SCHOOL OF EDUCATION

Principal Investigator/Student	Thomas McGovern				
Full Title of Project	You Forgot to Ask Me: The Experiences of Pupils Identified as Being on the Antism Spectrum within the Primary School				
Funding Agency/Course	END				
Proposed Start Date	01/02/2012				
Proposed End Date	91/02/2014				
is Ethical Approval required?	∉ Yes	CNo			
	(my research involves human partic pents)	(there are no human participants in my study)			
	flyes please complete the fermituly.	Studenta – your supervisor should complete. For student applications on section at the foot of the page.			
Date by which ethical approval is required	01/02/2012				
is this a full or staged application?	€ Full	∩ Staged			
		(are further applications for this project anticipated at this stage?)			
is Chair's interim ethical approval sought? (see p. 2)		€ No			
is ethical approval required from another governing body/agency?	○ Yes	€ No			
energies Boyelling bonhadench ((alease provide petails & attach any supporting documentation)				

DECLARATION

This proposal has been submitted for approval by the School of Education Research Ethics Committee
I confirm that the Research will be undartaken in accordance with (please delete as appropriate):

- (a) British Educational Research Association's Revised Ethical Guidelines for Educational Research (2004)
- (b) Soctlish Educational Research Association's Ethical Guidelines (2005)
 (c) Other (please detail) •

Signed: In Goan					
Date: 17.11.11	*		por .		
For student applications only:-	× 1				
Supervisor's decision: NA / approve /	refer to the SoE I	Research Ethics Co	mmittee fo	stiendo no	eration
Supervisor's signature:					

HEA REPLACE

Preamble

The following questionnaire is designed to enable the School of Education's Responsh Ethos Committee (SOEREC) identify potential stoical issues in your research project. Completion of this procedure is necessary for all research involving human participants (whether funded or not) camed out within the institute of Education.

If is our hope that engaging with this process will of value to your project, in thinking through its othical implications. If ethical issues arise during the course of your project, you are advised to consult the SOEREC in regard to ethical dilemmas etc. at any point.

Where do I send my completed form?

STAFF: Please sand this in electronic format and a hard copy of this form will, a copy of your research proposal to the Research Secretary (Laura Adam) who will submit it to the next available SOEREC meeting it ethical approval is needed before this. Chair's interim ethical approval can be given. Please indicate if this is required on the front cover.

STUDENTS: Please give the completed form to your project supervisor. If they are satisfied that you have appropriately dealt with any ethical implications, they can approve your application. Supervisors should sign the form and send it (or a copy) to Laura Adam. If there are any ethical issues which supervisors feel need further consideration, then they should refer the application to the Research Ethics Committee. This should be indicated on the front of the application form and the signed form along with an electronic copy should be sent to Laura.

If you request Chair's interim approval your proposal will be considered by two members of SOEREC and will then be reviewed at the next meeting of the full committee.

Questionnaire

A) Non-technical Summary (100 words max)

The SOEREC membership is diverse and includes representatives from other departments and organisations from the wider community. If is therefore helpful to provide a non-feedback overview. Things you might consider here:

who will be involved?

what will they be, esked to do?

what will happen to the data gathered?

Above will the Implications of the findings impaction the participants or others?

Pleasa note – it is necessary to ado a non-tachnical summary hare, covering the points listed above

The sim of the research is to exclore the experience of pupis identified as being on the autism spectrum within the upper primary in the wind we the following stakeholders — pupils identified as being on the autism spectrum, their peers resonant, support for learning staff and perents. All pupils will be asked to complete a Visual Natralive and a daily clary related to their school experiences. A selection of teachers, support for learning staff and perents will be asked to participate in semi-shuddred interviews. Once the research has been completed at date will be destroyed —digital popies will be colored and paper copies will be shredded. Its hooed that this research will influence and bring about Improvements related to practice for pupils identified as being on the autism spectrum at primary leve

B) Summary of design, methods and analysis : -

Please note – it is necessary to add a summary of the design, methods and analysis in this box.

The research will be costioned within a transformative framework. In the transformative framework. Knowledge is socially and historically situated with issues of power and privilege addressed explicitly. In order to address finis I will need to detail on a strong this cotword myself as the research and the research community. Data from the Visual Narratives and build district will be snellyzed using social captal theory. Semi-effuctured interviews will be transcribed and analysed using Online Discourse Analysis in its hipped that this research will influence and bring about improvements related to practice for pupils identified as being on the autism spectrum stiprimary.

1. Informing participants

1.1 What will participants be to diabout the study? Teachers, Support for Learning Staff and Parents – a summary of the aims and objectives of the study will.

WOVE OF SALE TORAL COMMENT OF PROPERTY OF SERVICES

	be shared with them. Pupils – a child friendly summary of the aims and objectives of the study will be short the powerpoint presentation detailed below.	nared with the	m as part
1.2	How will pacic pails be informed of the nature and purpose of the rescarch? Teachers and Support for Learning Staff – I will meet with them personally to discussed their role within it. Parents – permission will be sought for their son/daughter to partic pate in the studetter. For parents that are taking part in interviews I will meet with them personall in even more detail and obtain separate written permission for this via a signature. Pupils – a powerpoint presentation will be defivered to pupils outlining the purpose what their involvement will ontail.	dy through a s y to discuss t	gned he project
1.3	How will participants consent to being involved? Once participants are fully aware of the nature of the study a signature will be obtained on a consent form		
1.4	Will children or vulnerable adults be involved in the research?	Yes	C No
If yes	What steps will you take to ensure that they understand the nature and purpose of the research process? A powerpoint presentation will be used to puttine the research to pupits. When planning the presentation consideration will be given to the communicative strengths inherent in each of the groups taking part.		
1.5	How will participants be informed of their formal right to complain to the Head of SoE If the about the research process?	ey have any o	chcems
	The details about this will be provided in discussions but ining the mase reh including in the pupils. A copy of the contact details for the Head of SoE will be provided and take into communicative strengths within the studyierg, a cupil identified as being on the autism spoonfident in talking to a familiar adult who can then support them with their complaint.	account the	
1,6	Will data be stored in a national archive and/or used for other curposes in the future?	C Yes	@ No
If Yes	-ow will participants be advised of this?		
	Click here to enter taxt.		

2. Offers of confidentiality

2.1	What offers of confidentiality are you making?		
	Participants will be guaranteed anonymity and will not be able to be identified within	the research,	
2.2	How will you put these into practice? Identities of participants, schools and other information that may compromise confidence to protect participants.	entiality will be cha	ange in the
2.3	How will participants be informed of confident a 3y? This will be guaranteed at the consent stage and reinforced throughout the research aware that extracts from talk will be presented as data in the final version of the thes throughout the study that they can withdraw and also refuse to have their data used.	is. They will be re	be mede mirced
24	Will information about the participants be obtained from sources other than the participants themselves?	O.Yes	₹ No
If Yes	Please q voidelails;		
If Yes		nation?	

3. Right to Withdraw

3.1	How will participants be informed of the right to withdraw?

	Pacticipants will be informed of their right to withdraw during the initial consent stage and the consent form differentiated to ensure that all groups participating understand.	I this Willalso I	e writen on
3.2	Will they be reminded of this? Yes they will be reminded at each stage of the data collection phase.		
3.3	Will there be significant power differences between researcher and researched? (e.g. with young children)	@ Yes	C No
If yes	With young children) How will interactions be arranged to make withdrawal possible? (e.g. will young children be interviewed in the playroom or each of the classmoon where it is easier to move away than it would be if they were taken to another room left.) Interviews will not be used to gather data from publis. Publis will gather information using Visual Nametive and publicitaties they will have dynamication door how they go about collecting data in an attempt to belance the power offerent at between myself as researcher and the outils. Further will be made aware at each stage of the data collection chase of their right to withcraw and cow they can go about 191s. I will offerent at each stage of the data collection chase of their right to withcraw and congrunties on a formunication card that allows men to exist visually will be provided.		

4. Data storage

4,1	Will all data to be held on computer be stored in compliance with the Data Protection Act? Information on this can be found at: http://www.rec-man.stir.ac.uk/data-protection/index.php	€ Yes	€ Na
	Risaso explain Click here to enter text.		
4.2	How will hard copy data be stored? In a locked filing capinet and I will be the only key holder		
4.3	What steps will be taken to ensure the safe disposal and storage of data (both hard and electronic) at the end the project? All hard copies of data will be lout through the sprodder. All electronic copies will be deleted.		the erd of

5. Outputs

5.1.	Will participants be able to identify themselves e.g. in any reports or dissemination interests, by name directly, or by any other means that will permit you to match data to specific participants?	⊕ Yes	C No
If yes	Flease dotail: Given that the research may include extracts from talk or diary extracts it is possible that participants may be able to identify themselves but this will not be identificable to other parties. However, prior to publishing data consent will be sought for direct quotations.	7 3	
5.2	How will any assurances of confidentiality / anonymity / non-traceability the adhered to? (i) in regard to data analysis? Anonymity will be ensured by changing the names of individuals, echools and other inforcempromise the protection of identities.		ay
	(iii) in regard to subsequent dissemination? To ensure confidentiality, intendew transcripts will be shown to teachers, carents and St they will be provided with the opportunity to refuse publication. Moreover, any extracts frintended for use within the publication will be shown to the cupils first and they will be girefuse its use.	om pubil diarie	as that are
5.3	Do you intend to use research date for teaching ourceses?	C Yes	⊕ No
If yes	How will this be detailed in the consent? Click here to enter text.		

6. Use of photographs, video or audio recordings

6.1	Does the research involve the use of photographs, wideo nr audio reportings?	@ Yes	C No
If yes	(i) what permissions will you seek? Written consent at the initial stage		
	(iii) now will this data be used? Qupils will use data to create V sual Narratives and that will be used to analyse networks throughout the school.	- :	
	(iii) how will this data be stored? This data will be stored within each school and will be password protected. Lessons on protecting files will need to be carried out with publis prior to gathering data. Data will be copied onto a pen drive and immediately password protected before being moved to		
	my home computer where it will also be password protected		

7. Other issues

7.1	Are there issued in the proceed research which could be anticipated to be contentious or ethically problematic?	∩ Yes	@ No
lf yes	Please provide details and a justification, Click here to enter text.		
7.2	Will any inducement be used to obtain the subject's participation?	C Yes	@ No
lí yes	Please deta : Click here to onter text.		
7.3	Will your research involve deception?	C Yes	€ No
If yes	Please provide details and a justification Click here to enter text		
7.4	Does the study involve a risk of either physical or emotional stress to participants, or is there any reason to think that some participants might enticipate such stress?		C No
If yes	Please provide details and a justification it is possible that pupils identified as being on the autism spectrum may find Visual Narrative difficult in initial stages and will therefore need to be prepared well in advance for the stant of the research. Visual Narrative is a botter fool than interviews for pupils identified as being on the autism spectrum due to the fact that this group show greater strength in communicating when visuals are involved. This is a better option than interviews where dialogue dominates.		

8. Research Staff

8.1	Are there any expectations that research staff will be subject to risky or stressful situations e.g. research in a participant's home, or exposure to a potentially distressing situation?	C Yes	€ No
If yes	What measures will be in place to support such staff? Click here to enter text	1	

Thank you for completing this form. Please send this in electronic format and a hard copy of this form together with a copy of your research proposal to the Research Secretary (Laura Adam).

Appendix 2 Letter to the Director

Dear Director,

I am currently a class teacher within the Autism Support Facility at Lakeside Primary School and also a Doctoral Student at The University of Stirling. I am at the stage where my proposal has been accepted by the University and has got through the ethics committee. I plan to carry out my research within your LEA but before formally approaching any of your schools (including the one I work at), I need your permission. Within this email I have enclosed a summary that includes a rationale, objectives and the benefits the research will bring. If you have any queries or need more information before permission can be granted please let me know and I will be more than happy to provide it. I look forward to hearing from you in the near future.

Yours faithfully,

Thomas McGovern

Appendix 3 Letter to Head Teachers

Dear Head Teacher,

I am currently a class teacher within the Autism Support Facility at Lakeside Primary School and also a Doctoral Student at The University of Stirling. I am writing my thesis and intend looking at the experiences of pupils identified as being on the Autism Spectrum within mainstream classrooms. The Director of Education has already granted permission for me to carry out this research within the authority. For the remainder of this year, a small sample of pupils would be expected to complete a daily diary which would require minimum input from yourself and your staff. In block 1 of next session (August to October), the same small group of pupils will be expected to continue with their diary for 4-6 weeks and will also complete a visual narrative so I can find out more about their experiences at school. I will work directly with the pupils to complete the visual narratives. I realise the demands on you and your school at this time of year, but I would appreciate it if you would consider participating in this important research. I have enclosed an overview of the project outlining things in greater detail. If you are interested in participating please let me know as soon as possible. I look forward to hearing from you in the near future.

Yours sincerely,

Thomas McGovern

Appendix 4 Consent Form





Making a Photo Story

Step 1

• Take a photograph of at least 6 areas you use the most at school. 14 minutes.



Step 2

• Return to Base and hand back the camera

Step 3

The photographs will be uploaded onto the computer for you.

Step 4

It is time to make your photostory

What you might say about each



What kind of things do you do here?

Is there anything you like about this place?



1)

2)

Is there anything you don't like about this place?

4) Do you have anything else to say about it?

*Remember you don't need to answer all the questions for all the photos.

Appendix 7 Letter to Class Teachers

Dear Class Teacher,

As you will be aware there are some pupils in your class participating in a project

looking at their experience at school. I realise the demands on class teachers are

extremely high in the current climate but it would be appreciated if time could be

found for pupils to complete their diary each day.

Although near the end of the day would be ideal for this activity, time could be

provided at other parts of the school day to ensure minimum disruption to the

classroom routine. Pupils were given the choice of the type of diary they wanted to

complete at the start of the project and those who have selected an audio or written

diary have been issued with the tools they need. Others have opted to 'type' their

diary and will need to negotiate access to a computer with you as class teacher. If

this creates challenges please do not hesitate to contact me at the above address

and we can look at potential solutions to this problem. Also, if you have any other

general concerns please do not hesitate to contact me or catch up with me when I

am in school to work with pupils.

I have also enclosed an overview of the project with this letter.

Regards

Thomas McGovern

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Appendix 8 Interview Invitation to Teachers

Invitation for Participation in Research Project

You have been invited to participate in research that is looking at the experiences of pupils identified as being on the autism spectrum within the primary school. One aspect of the project is to gather the views and experiences of teachers in supporting pupils identified as being on the autism spectrum in mainstream classrooms. As you currently have a child in your class taking part in this project, your experiences and opinions are particularly important. It is important that your experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist for you and how these may be overcome. You will be able to share your experiences and opinions through an interview that will last approximately 30 minutes.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will record the interview using android software and immediately following the interview will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisor Dr. John I'Anson at the University of Stirling during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, the school's name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use.

I realise how busy things are at the end of term but I would appreciate it if you could find time to give an interview. If you wish to take part, please let me know and I will arrange a time to come and meet with you. I look forward to hearing from you in the near future.

Yours sincerely,

Mr. Thomas McGovern

Appendix 9 Interview Invitation to Teaching Assistants

Invitation for Participation in Research Project

You have been invited to participate in research that is looking at the experiences of pupils identified as being on the autism spectrum within the primary school. One aspect of the project is to gather the views and experiences of Support for Learning Assistants who support pupils identified as being on the autism spectrum in mainstream classrooms. As you currently support a child taking part in this project, your experiences and opinions are particularly important. It is important that your experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist for you and how these may be overcome. You will be able to share your experiences and opinions through an interview that will last approximately 20 minutes.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will record the interview using android software and immediately following the interview I will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisor Dr. John I'Anson at the University of Stirling during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, the school's name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use.

I realise that you may be busy and have other commitments, but I would really appreciate it if you could find time to give an interview. If you wish to take part, please let me know by emailing me at thomas.mcgovern@stir.ac.uk or calling me on XXXXXXX. Alternatively, you can return the attached slip to the school office and I will collect. I look forward to hearing from you in the near future.

Yours sincerely,

Mr. Thomas McGovern

Appendix 10 Interview Invitation to Parents

Invitation for Participation in Research Project

You have been invited to participate in research that is looking at the experiences of pupils identified as being on the autism spectrum within the primary school. One aspect of the project is to gather the views and experiences of parents who have a child identified as being on the autism spectrum currently at primary school. It is important that your opinions and experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist and how these may be overcome. You will be able to share your experiences and opinions through an interview that will last approximately 30 minutes.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will make an audio recording of the interview using android software and immediately following the interview will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisor Dr. John I'Anson at the University of Stirling during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, your child's name and the school name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use.

I realise that you may be busy and have other commitments, but I would really appreciate it if you could find time to give an interview. If you wish to take part, please let me know by emailing me at thomas.mcgovern@stir.ac.uk or calling me on XXXXXXXX. Alternatively, you can return the attached slip to the school office where I will arrange for it to be collected. I look forward to hearing from you in the near future.

Yours sincerely,

Mr. Thomas McGovern

Appendix 11 Consent Forms Teachers Consent to Participate in Research Activity

Thank you for agreeing to provide an interview for this important research topic. As previously communicated, one aspect of the project is to gather the views and experiences of teachers in supporting pupils identified as being on the autism spectrum in mainstream classrooms. As you currently have a child in your class taking part in this project, your experiences and opinions are particularly important. It is important that your experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist for you and how these may be overcome.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will make an audio recording of the interview using android software and immediately following the interview will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisors Dr. John I'Anson during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, your child's name and the school name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use. You may choose to withdraw at any stage including during this interview.

Mr. Thomas McGovern (Doctoral Researcher)	
I give my consent to participate in this research.	
Name:	Date

Appendix 12 Consent Forms Teaching Assistants Consent to Participate in Research Activity

Thank you for agreeing to provide an interview for this important research topic. As previously communicated, one aspect of the project is to gather the views and experiences of Support for Learning Assistants who support pupils identified as being on the autism spectrum in mainstream classrooms. As you currently support a child taking part in this project, your experiences and opinions are particularly important. It is important that your experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist for you and how these may be overcome.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will make an audio recording of the interview using android software and immediately following the interview will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisor, Dr. John l'Anson during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, your child's name and the school name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use. You may choose to withdraw at any stage including during this interview.

Yours sincerely,	
Mr. Thomas McGovern (Doctoral Researcher)	
I give my consent to participate in this research.	
Name:	Date

Appendix 13 Consent Forms Parents Consent to Participate in Research Activity

Thank you for agreeing to provide an interview for this important research topic. As previously communicated, this research is looking at the experiences of pupils identified as being on the autism spectrum within the primary school. One aspect of the project is to gather the views and experiences of parents who have a child identified as being on the autism spectrum currently at primary school. It is important that your opinions and experiences are shared as it will contribute to our understanding of what schools are doing well with regard to supporting pupils identified as being on the autism spectrum as well as identifying the challenges that exist and how these may be overcome.

The research has been approved by the Ethics Committee at the University of Stirling and the Director of Education. As such, careful consideration has been given to the ethics involved in this study as my main priority is to protect those participating in this study. The information shared in the interview is confidential and steps will be taken to ensure this. I will make an audio recording of the interview using android software and immediately following the interview will upload the audio file to a laptop where it will be encrypted and password protected. I will be the only person who has access to the file but I may at a later date share it with my supervisors Dr. John I'Anson during the data analysis phase of the project.

In any published work linked to this research, your anonymity will be ensured by changing your name, your child's name and the school name and any other information that may compromise your identity. In addition, any extracts from your interview intended for use within any publications related to this project will be shown to you first and you will be given the right to accept or decline its use. You may choose to withdraw at any stage including during this interview.

Mr. Thomas McGovern (Doctoral Researcher)				
I give my consent to participate in this research.				
Name:	Date			