

The ‘neurological outsider’: using relational intelligence to link multiple aspects of autism

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Introduction

The logo of the National Autistics Society is a jigsaw with an unconnected piece. As well as aptly signifying the individual who does not fit in, this symbol also captures the search for the elusive and decisive cause of autism. We consider how some current influential theories about the causes, i.e., weak central coherence, theory of mind, attachment, mirror neuron impairment and interpersonal responses, all may be linked by a dialogic approach better served via an integrated, interactive, multi-factorial approach. We consider how theories that at a superficial level may seem to compete are linked dialogically at a super-ordinate level. We introduce a dialogic and multiply sourced understanding of intelligence, which we describe as ‘Relational Intelligence’. We aim to show how relational intelligence is constructed from component intelligences whereby; weak central coherence might be seen as executive intelligence; theory of mind links to empathic aspects of emotional intelligence, and attachment theory refers to what we call ‘communal intelligence’ whilst, mirror neurons help explain the relational origins of communal and emotional sources of intelligence Finally, interpersonally and socially restrictive reactions to autism relate to what we describe as a restrictive kind of societal intelligence.

Relational Intelligence: Integrating these separate findings into a pluralistic, multi-factorial model.

We propose to understand how these **various** factors, identified in the literature as explaining autism, are all part of a broader interaction if located within the concept of relational intelligence. We see the establishment, use and maintenance of intelligence as a joint activity between the individual and society, thereby moving the gift or burden of intelligence away from the autistic individual and towards the individual in his or her context.

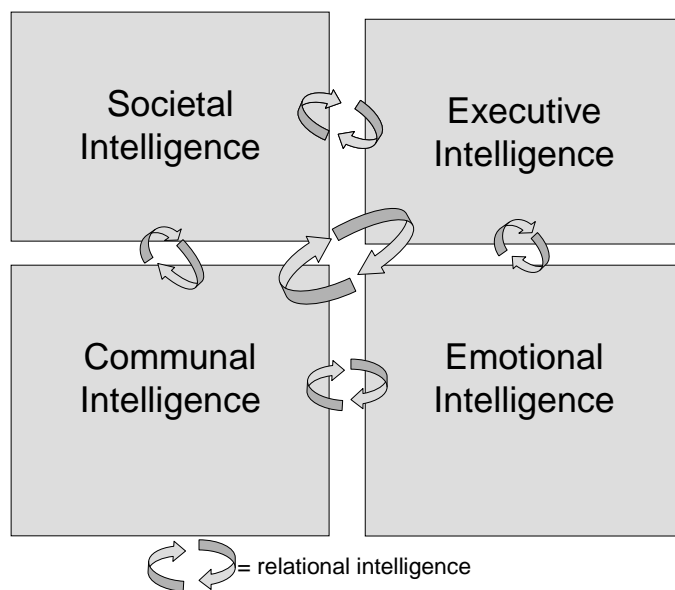
Intelligence has been psychology's big idea in the 20th century, moving from being predominantly seen as a general and stable competency measured by the testing of language use, arithmetic, reasoning and logic to being also understood as multiple intelligences including creative, emotional well as interpersonal, intrapersonal and executive components.

Individual intelligence doesn't necessarily explain the origins of differences in intelligence or predict the use of knowledge and intelligence in practice in changing contexts. The cultural, ethnic, gender and class variations in intelligence lay siege to the idea that it is simply a matter of individuals and their cognitive abilities. Bright people can do silly things. People with low IQ can show compassion or giftedness in other respects. IQ has different value in different cultures, applications and contexts. It has many components, which may not all hang together or depend upon the one neurological scheme. It is not good science to act as if IQ is measuring the sum of intelligence; when IQ only measures those capacities that can be captured by pen and paper tests. For a multi-factorial view of autism, we need more pluralistic and versatile views of *intelligences*.

Relational intelligence views the many sources, dimensions and types of intelligence as a reciprocal activity between self and society. The richness and complexity of our relational intelligence has grown through a cycle of tool development, group thinking and brain development. As we have grown smarter (not necessarily wiser), we have invested more varieties and complexities of intelligence in the artefacts and activities of our, endlessly developing, culture and community, which in turn, through childcare and education, has led to increased individual intelligence and complexity of interaction between cultures, societies, minds and brain use. To try and be on terms with this complexity, the idea of relational intelligence is used to capture the shared experience doing intelligent things for and with self and others.

Relational intelligence is the orchestration of four linked sources of intelligence: communal, emotional, executive and societal as depicted in figure 1. This views the intelligence of any particular activity, knowledge or interaction as a shared, dialogic intelligence that works between society and us and within others and us.

Figure 1. Relational intelligence is the orchestration and integration of multiple intelligences through interaction with self and others



Emotional Intelligence, cognitive intelligence or behavioural intelligence are not enough on their own as schemas of knowledge are always internalised relationally with units of memory, feeling, behaviour, belief and thinking, welded together like links in a chain. Relational intelligence captures the complex links between multiple elements. For example, implicit in the activity of driving, it is the continuously changing judgements and skills (personal, executive intelligence) of the car driver, following traffic signs (societal intelligence) using the internalised knowledge from learning the Highway Code (societal intelligence and executive intelligence combined) with a shared trust or vigilance (communal intelligence) about the patterns of responsiveness of other drivers to be calm, wary, competitive or rageful etc. (emotional intelligence). Relational intelligence is simultaneously an expression of the processes of all the above intelligences interacting, the skills of orchestrating them in safe and effective driving and the product in the smooth flow of traffic. When it is enabling in the car-driving example the traffic flows smoothly, the drivers are not over stressed, and the road systems are fit for purpose. When relational intelligence is restrictive: the roads are too narrow, the traffic too much, the drivers too competitive etc. The concept of relationally intelligence allows a multi-factorial and multilevel analysis of the orchestration of intelligences in any one incident, individual, system or culture. Orchestrating these multiple intelligences requires an appreciation of their reciprocation and different forms of expression both from

within the person consciously and unconsciously and from society and culture both explicitly and implicitly.

Weak central coherence or executive intelligence in autism

Many people with autism focus their energy on reducing the chaos of overwhelming sensory overload by trying to keep everything the same and, as Simon Baron-Cohen (2002) describes, develop extreme systematising. He describes this ability as an extreme version of the 'male' brain in which detailed information about a highly circumscribed system is obtained that offers some emotional pleasure in a predictable part of the world. We shall subsequently describe this as one aspect of an absence of relational intelligence.

Twice a year, when daylight saving causes clocks to be altered by one hour, means several weeks of extreme agitation and distress for one man with autism and his staff team, as he panics, appearing to experience a collapse in his sense of the stability of time. Weak central coherence, (Frith & Happe op cite), – or lack of flexibility of perspective, intensity and focus causes an inability to see perspective and then patterns which means events are not linked, neither are incidents, moments and movements in relation to self and others. Weak central coherence also results in a high level of field independence in which the person is far better at spotting figures that are embedded in a context than someone with strong sensory heuristics and the ability to relate detail to perspective (or tree to wood).

The rapid increase of research into autism now possible because of advances in neuro-imaging and modelling, includes descriptions of impairments centred on problems within general information processing, particularly reduced central coherence, (Frith & Happe, 1984 etc). This cognitive model, familiar to most readers, describes how people avoid being bombarded by sensory information through developing perceptual and cognitive heuristics and behavioural procedures, which permit a fluent flowing between multiple mental states. Deficits in cross modal sensory correspondence, (Stern 1998) result in reduction in the ability to pull together vast amounts of individual pieces of information. Without a unitary semantic system, much information remains beyond the person's connective or relational reach and is experienced as a surfeit (Rubenstein & Merzenich, 2003).

People with autism have limited scope for empathy and mutual negotiation. They miss the fun, intrigue and curiosity that propel most people into unpredictably fascinating dialogues. This lack of curiosity is not merely passive, but insistent, definitive and final. They also lack the ability to dance out of the way by empathically reading the other's intentions. They also lack the ability to dance out of the way by empathically reading the other's intentions. Verbal exchanges with someone with autism are often more like consecutive monologues than conversations. Because being able to navigate and orchestrate a multitude of stimuli of is hard to imagine or do, a person with autism may find meaning only in the constancy of a relationship with a particular ability, activity or ritual, offering fidelity in an apparently unstable world. The cost for the individual is that not only is it impossible to change the world to match their viewpoint but attempting to restrict their encounter with the world to such an extreme degree is not good for mental health, as they risk psychosis, (Tantum, 1991). This might be put as a dilemma of either being "in restrictive control and cognitively safe and secure" or being "out of control and experiencing cognitive chaos". An older woman with autism who now has dementia is more able to tolerate close physical proximity from other people and as her dementia progresses and her executive functioning decreases, she no longer pushes other people away.

The concept of 'Executive Intelligence' is useful to describe an instrumental, intentional, calculating or prefigured sense of purpose and self. This is our procedural knowledge. It is called 'executive' because it captures the top down or centre outwards way of choosing a line of action and meaning from among several, in order to make something of the life space in which we find ourselves. It is the ability to know this is what I need or want and here is a way of going about it that might work. It is the ability to monitor and evaluate progress in an 'executive' way and to steer and negotiate how things turn out. It arises out of and depends upon a mix of shared communal intelligence, emotional intelligence and societal intelligence. It is experienced as a sense of agency or will power, purpose and motivation. It is highly variable in quality and expression. Overly cognitive views of executive intelligence underplay the flexibility of focus, intensity or perspective involved in choosing to attend to one line of procedural knowledge and action and

not another. In this sense executive intelligence is always expressed and lived within a wider mix of relational intelligence. As we shall argue, a framework is needed for exploring flexibility with the multiple sources and types of information in play that result in selecting and evaluating any specific course of action as against another. From a multi-factorial point of view, it might be better served to think of weak central coherence as an aspect of executive intelligence. In autism we see a strong but narrowly defined executive intelligence, which looks for a narrow reciprocation from a circumscribed part of society, cut off from other sources of intelligence. The inevitable mismatch between the person with autism and society's norms often leads to crossed wires and frustration for everyone.

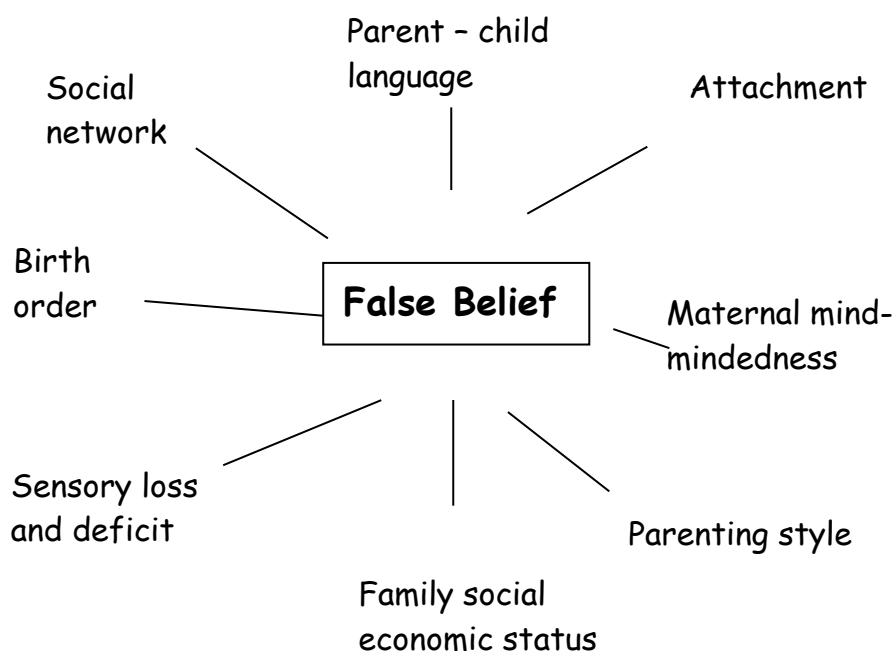
Theory of Mind and emotional intelligence

A second primary deficit postulated in autism describes the cognitive component of empathy. Theory of Mind (e.g., Perner, Frith, Leslie & Leekam 1989; Baron-Cohen, 1996;) is the ability to infer a full range of mental states from another person's behaviour explicated in the famous Sally-Anne procedure (Baron-Cohen op cit). It is a one-person psychology in which person A gets to know that Person B has a psychology.

Theory of mind deficits are not just specific to autism, psychosis and in narcissistic personality disorder (Fonagy 1989), but can also be seen to be operative in specific situations, such as road rage, romantic infatuation, war etc. In our view this is because our ability to make meaning is dependent on (actual or internalised) mutually negotiated, reciprocal activity with others, (Beebe & Lachmann 2002). Without reciprocation through a shared, relational intelligence, our individual intelligence (meaning making or knowledge) is at greater risk of stagnating or distorting.

Lewis (2008) describes how most mainstream theories depict Theory of Mind as a cognitive model in which individuals are theoreticians, but his meta review of research into this popular field shows that all of the factors (outlined in Diagram 1) shows that Theory of Mind is developed dialogically and is inherently relational. Therapeutic efforts to ameliorate this deficit includes cognitive exercises in learning

to describe a view of an object from a person sitting opposite and social and emotional approaches attempting to build victim empathy in perpetrators.



Lewis' analysis of how the factors influence success at the False Belief Test¹ supports Vygotsky's (1978) Bakhtin's (1981) and Hobson's (1989, 1993) theses that links between an individual and an 'object' (such as an event) are mediated and coloured by multiple dialogues with people and ideas. As Bakhtin, would put it, the mind and its moments of utterance are always multiply addressive and multiply sourced. Although Theory of Mind is a rich idea, it is too one-dimensional. The original concept is too much about another's capacity to empathise along their own single track. To be cognitively involved in the world we need both procedural and dialogical knowledge, or in other words, we need to be relationally aware of multiple choices for connection, understanding and action. We need "Theories of Minds". Is there a parallel with emotional intelligence and the importance of empathy?

Attachment, autism and communal intelligence

Investigations of home videos of babies who are later diagnosed with autism, (Muratori & Maestro 2007), demonstrate how affected infants show fewer

¹ This test evaluates a subject's ability to ascribe definite but false beliefs to another, such as in the Sally-Anne procedure

contingent responses to their mothers than non-autistic children. Nevertheless, applying Ainsworth's Strange Situations paradigm of attachment research in infants comparing children with autism and their controls, shows that the former often ~~can~~ prefer their Mothers to strangers (Dissanayke & Crossley 1996; Shapiro, 1987; and Yirmiya & Sigman 2001). These authors conclude that children with autism do show a range of attachment styles although overall, fewer are securely attached. These and other similar results might imply that if there were little difference in capacity to achieve attachment between children with autism and their controls, then an awareness of and attunement to the other's mental states is not required for attachment. This conclusion contradicts a wider relational understanding of attachment in which different styles of attachment are attributed to the baby knowing about and attuning with the Mother's typical responses. Of course, at a biological survival level, the child may need to ignore an unhelpful Mother's typical style, so their biological needs are met, but these results appear to show that if secure attachment in autism is possible, then attachment and awareness of mental states i.e., a theory of mind, are two different processes.

A closer examination of these papers shows differential behaviours between children with autism, Downs Syndrome and controls regarding sociability and shared attention. If attachment is only defined as proximity seeking and safety behaviours, then there is no difference between the groups, but if 'secure attachment' includes shared interest, then there are significant differences. In fact, all studies appeared to show that for children with autism, their motivation to interact was more dependent on core needs such as for food or comfort, or self-needs such as requesting preferred objects, people or situations, than an intentional desire to share an experience with another. Winnicott describes how in normal play with a mother there is co-direction; a perspective endorsed by Stern and Trevarthen and Beebe and Lachman (op cit) describe how Theory of Mind and Attachment come together in how the infant processes their experience. This is missing in autism.

The fixed description of attachment styles seems over narrow and may miss some of the variability in early and subsequent patterns of interaction where emotion,

motivation, belief and consequence are added to the behavioural unit of analysis. A freer descriptive and explanatory framework for attachment behaviour is offered by the reciprocal role mapping of early emotional role responses (described by Cognitive Analytic Therapy), shown in attachment behaviours. These intimate and fundamental self-in-the-social-world abilities may be described as 'Communal Intelligence' i.e., the underlying intelligence of our culture and environment, which reciprocates with and develops hand-in-hand with emotional and executive intelligence within the individual. Communal intelligence comes from primary family and group experience. In this spirit, attachment behaviour takes on a more complex relational and dialogic meaning and may operate in the space between us rather than the mind within us. It is precisely a neurological lack of the participatory wiring or relational intelligence that leads the autistic person to be an outsider. From a dialogic, multi-factorial point of view Attachment theory and Theory of Mind are therefore interdependent.

How understanding Mirror neuron dysfunction is used to describe autism in terms of a rupture between communal and emotional intelligence

Advances in cognitive neuroscience using functional magnetic resonance imaging have shown the operation of mirror neurons (Rizzolatti & Craighero 2004) which discharge for both the observation and execution of similar actions (i.e., both doing an action and watching someone do that same action). To us this describes a basic component of communal intelligence, which is to share the experience of an action with another doing that action. Research demonstrates that people with autism show no mirror neuron activity whilst imitating and observing emotional expression, (Dapretto, Davis, Pfeifer et al 2006) or whilst observing another person's actions, although there is mirror neuron activity when they themselves are performing an action (Oberman et al 2005). This deficit in being able to draw upon communal intelligence in the primary family or social group, leads on to blocks in developing the ability to function relationally within society. Socialising of children requires gradual increases in empathy, attuning and schooling in the ability to respond with increasing sensitivity and versatility to social, emotional and semiotic offerings. Emotional intelligence is the internalised aspect of communal

intelligence then modified and developed to respond to our complex society and to executive needs to assert purposes, make plans and evaluate outcomes. Communal intelligence broadens nowadays into the form of some degree of executive participation in the societal intelligence of more developed cultures and societies. These early interactions grow out of a communal intelligence and are internalised through joint intimate attachment activity through our predisposed readiness in normal circumstances to be relationally intelligent from birth. The resulting web of limiting and enabling patterns makes the social being. In our early years as in our early evolution our conscious group life and executive ability was expressed as what we nowadays describe as emotional intelligence. These patterns are well described by the idea of reciprocal role procedures.

Normally functioning mirror neurons provides people with the biological evolution necessary from which they can build social and cultural relational abilities used to learn to dance many interchangeable dances in response to our society and the key people who embody and present that society to us. When there is mirror neuron dysfunction, the resulting autistic deficit impairs actively participating in and adapting to the social flow. A young man on the autistic spectrum has learnt that it is rude to interrupt, so he waits his turn patiently. However, each time he speaks it is to continue where he left off, without any acknowledgement of what the other person has just said. Appearing socially aloof, passive or odd (Frith 2003), the person with autism doesn't have the innate pre-disposition to participate in the underlying communal intelligence of society.

Self, society and autism

The term 'autism' became used as a short-hand metaphor for a lack of social relatedness, with implications for a sense of self and Theory of Mind. It has even been used in some psychoanalytic literature to describe a normal stage of infant development (Mahler 1975, Klein 1987) when society doesn't seem to impinge. To what extent are people with autism affected by relationships whether in the early formative stages of their life as infants, children and teenagers or through their current relational environment which involves either care and neglect?

There is a great deal of confusion regarding relationships in autism, opposing opinions are held passionately. On the one hand, Donna Williams (1992) in her autobiography 'Nobody Nowhere, describes how having autism protected her from being damaged when receiving maternal physical and emotional abuse. If a highly impaired theory of mind makes a person with autism less aware that another has intentions, then they might be protected by not perceiving the tyranny of someone whose intentions are malign. However, just because the autistic person operates with seriously impaired social relatedness does not mean that they do not relate emotionally. It is possible that Williams' attributions of her emotional reaction are coloured by her expectation that someone with autism would be impervious.

At the other end of the spectrum, for Bettelheim and the staff at the Orthogenic School, autism held no mystery. There was only one cause: 'refrigerator mothers'. The incessant infant withdrawal was owing to inadequate parental responsivity. The child's every action was a reaction to the unconscious (i.e., irrefutable) wishes of the parent to destroy the child. This implied that if all Mothers were good enough, autism would not exist. A distraught Mother of three boys said that she had treated them all the same, so why did one have autism whereas the others did not?

It took statements based on empirical research, such as by Rutter (2002), "The genetic risks for (autism) are not dependent on the children encountering environmental hazards", for psychological researchers to examine the possibility that parents of children with autism tended to reduce their emotional expression because those children become overwhelmed by raw emotion and find being approached threatening. Psychoanalysts such as Alvarez (1992) discovered that they had to modify their earlier practice of working via the Kleinian concept of projective identification because this failed and more psycho-educational skills were needed.

Applied Behavioural Analysis and other similar skills-based approaches including Daily Life Therapy at the Higashi Schools, remain the most successful approaches and these do not focus on the affective quality of helping relationships (although recommending reducing intensity), but concentrate on teaching people with autism

to imitate specific social and observable procedures. Coaching observable behaviours appears more realistic and accepts that owing to communication difficulties, the internal world of someone with severe autism can only be appreciated indirectly through our imagination. Although our imagination allows empathy and compassion, the limitation is that in seeking to understand we project our material onto the individual. A member of staff stated that the client was *really* very clever and chose to refuse to do what she asked, whereas an assessment of his language abilities placed his comprehension below a 20-month level. The resultant frustrating absence of a deeper level of real meaning implies the need for a flexible and pluralistic model. Just because the neurological underpinnings that cause autism are becoming clearer, this cannot be the whole story as having autism sets up a feed back loop in which the person experiences the trauma of their state and attempts to manage it by an extreme narrowing of their curiosity, resulting in stultifying their repertoire. This shutting out of wider intelligence and possibilities, which Sinason (1992) calls “secondary handicapping” is often seen in people with learning disabilities who are overwhelmed by loss, abuse and trauma. The result is a double disability: firstly, there is the original neurological damage and secondly there is the sense of a self with reduced agency, which the disabled person learns from interactions with others. This does not exclude the exceptional possibility that there may also be a counter ability, through the reverse process, of a very gifted or distinctive and empowering response to the original disability.

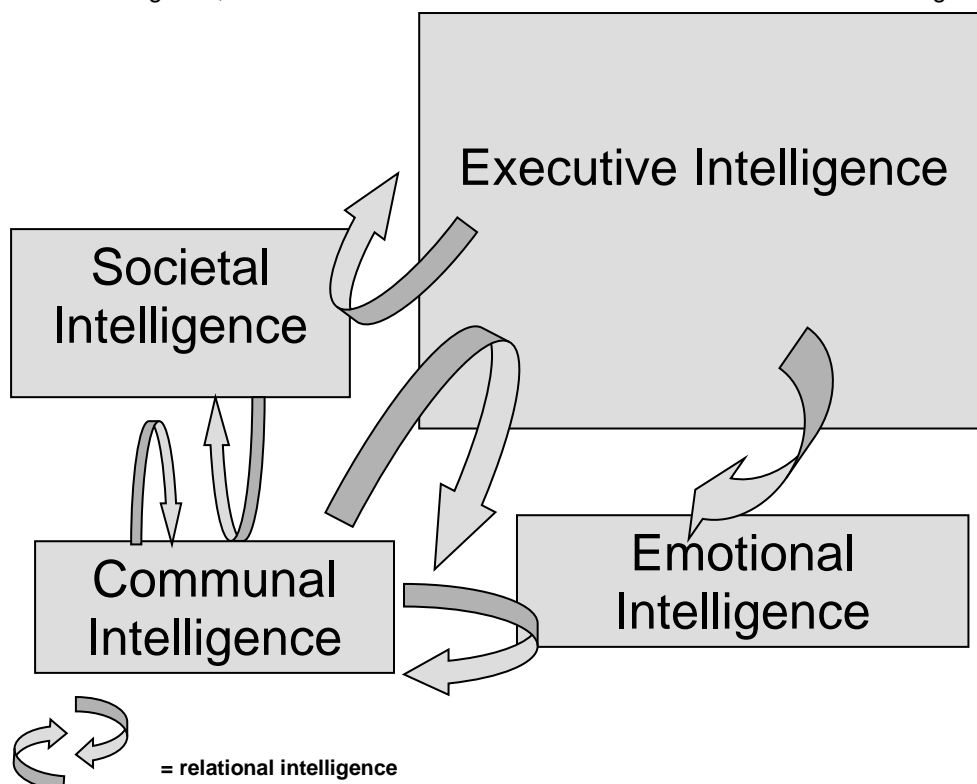
In the more contemporary language of dialogic views of the self, (Hermans 1993), and more recent relational views of psychoanalysis, the sense of self is dependent on the relational matrix in which it is formed, and this would apply just as much to the autistic person as anyone else. These dialogic views work with an idea of internalisation of the social world and that is precisely what the autistic person has difficulty doing. However, the social world does take a unique shape around and within the life space of the autistic person and the distinctive relational features of autism will play their part in the social construction of this in limiting or enabling ways. When a person with autism pushed into a queue at a fair ground and was threatened by an outraged man, a member of the public attributing the first person’s

behaviour to autism, immediately approached him, protecting him by inviting him to go on the ride with her family.

In addition, as well described by Sinason (op cit) in regard to children with learning disabilities, the autistic child may become entrapped in a secondarily disabling relational world creating a second so-called disability. As information floods in from societally intelligent sources, the autistic child may develop narrow areas of apparent felt control but shut off or shut out much relational experience and develop an executive self/intelligence that is chronically warding off intrusion and holding on to carved out areas of some certainty.

For the person with autism, the ability to develop the sufficient level of astute social participation and control is severely compromised by the combined action of multiple deficits; lack of theories of minds; a level of attachment that is about seeking proximity to meet core biological needs rather than an inherent interest and curiosity in other people; an inability to switch perspectives owing to weak central coherence and a lack of a felt sense of what other's experience through deficits in mirror cell development.

Diagram 2 - with severe autism relational intelligence is filtered through an overdependence on executive intelligence, which inhibits the interaction between the four sources of intelligence



In relation to figure 2, effective internalisation on society's terms depends upon a capacity for reciprocation by the child. In all the elements of multi-factorial understanding of Autism, the common factor that the autistic person lacks is an interest or ability in reciprocation, demonstrating a general absence of empathy for others and, thereby, lacking links between communal and emotional intelligence. This explains why most people with autism have great difficulty in describing, explaining or labelling and therefore processing, their own emotions as well as the emotions of others. Even those people with autism who have sufficient intellectual ability to learn to distinguish between and correctly label basic feelings, such awareness is at an intellectual level permitting them to work out what feelings are expressed, but without a sense of communally felt attunement. In this light, theories of minds grow from emotional and communal intelligence. Effort at an executive and instrumental level of intelligence, endowed by general intelligence may make for rich specialist knowledge and significant achievements in the world, but without an integrative or relational connection with a shared communal intelligence, and society's invitations to intelligent interaction may feel alien or threatening.

When interacting with someone with autism, the traffic between executive intelligence and emotional intelligence is one way. The same applies to the traffic between executive intelligence and society. A communal or basic reciprocating intelligence is absent. These gaps restricting the development of relational intelligence have devastating consequences on the person's sense of themselves. Gaps include the deficits in imitation (Rogers & Pennington 1991). This has a devastating impact on the self and on what society makes of people with autism. Mahler (1949) wondered if people with autism were human, describing autism as "a loss of that primordial differentiation between living and lifeless matter". Few people would find so little humanity in people with autism, but this is echoed in papers on the Internet written by some high functioning people with autism, in which they position themselves as aliens and demand recognition that autism is a way of being. Some people have attempted to cope with this life on an 'alien' planet by writing books describing the rules of human social interaction (e.g., Zaks 2006).

When relational intelligence is restricted through autism

In the special case of autism there is an absence of an ability to link early emotional intelligences to the communal intelligence of the world around (see figure 2). This absence of an ability to regulate the input of communal information creates difficulties with developing theories of minds and regulating intimacy and distance in attachment behaviours, blocking the chance to fully participate in the relationally intelligent richness of early developmental experience.

Autism as a neurological condition, must have been always with us. The persistence and eye for detail that autism exposes would have been very welcome in a Stone Age toolmaker, and in the pre-enclosure farming era, the ability to thrive despite social isolation helpful for an autistic shepherd. In more complex, contemporary and radical open societies there are conflicting empathies, competing narratives and exposed hierarchies of power and control. In our complex society, we need to be able to move with enough coherence, attunement and flexibility from one role to another, to be more relationally intelligent and more multi-tasking. These are many attributes that are particularly associated with being female. As we gain freedom of control over changing levels of perspective and understanding and vary the intensity of engagement, we find the focus of our attention frequently changes. A person with autism must face such complexity and variety of roles and identities in which they are often exposed as socially inept or making choices that most people would reject or deride. If, as Baron-Cohen describes, autism were an extreme version of being male, then the increase in diagnosis in recent years may be the result of autism standing out more in response to dispersed, overlapping, exposing and complex social systems. Mostly we develop group and individual ways of joining and separating (throwing out lots of signals about the dance of attunement and involvement or defence and disengagement). The autistic person has fewer resources for manoeuvre in current times in comparison with more traditional enclosed communities and therefore stands out, triggering secondary responses such as bullying, misunderstanding and derision.

Conclusion

Recent advances in neurology overlap with developments in psychological and relational understanding that have enhanced the development of bio-psycho-social models of full-blown autism. Competing models still search for a single cause despite looking at similar phenomena. The frustration is that searching for a single departure point tends to lead to partial solutions. We see value in offering a big picture, pluralistic view, which avoids a unitary theory. In the process not only are theories more richly engaged with, but also the multiplicity of practical approaches to autism involving both coaching and ecological changes are interlinked.

The interacting elements that build relational intelligence (societal, emotional, communal and executive functioning) function not within any individual, but between people. Hence, impairments in theory of mind, impoverished attachment, and a coping mechanism involving the severe curtailment of curiosity which progresses into secondary handicap on top of the original neurological deficit, may all be described as impaired relational intelligence. There are many moments and ways of feeling an outsider in contemporary society and the depth of alienation any of us can experience has been widely explored through literature and philosophy. The clinical challenge in understanding autism theoretically and responding practically is to empathise with the way in which the autistic person is uniquely a neurological outsider, set apart from the relational intelligence that flows through individuals and society. Our approach to the outsider in ourselves and in others is either to shun and misunderstand **or** want to connect and breakthrough heroically into contact. Both approaches are predicated on the intrinsic expectation of reciprocation in the non-autistic worker for better or worse. The clinical and theoretical human frustration is in not being able to elicit either kind of reciprocation with the autistic person leading to mutual bewilderment or other more uncomfortable responses such as despair, anger or the triggering of the worker's own narcissistic wounding due to their own receipt in early life of non-responsiveness.

Relational Intelligence is a fruitful concept when applied to theories about people with autism and their individual positioning and subjectivity in society. At the very least it offers a fresh perspective to look at how key current theories interlink. At the

best it offers a more versatile and open framework for thinking about how autism is caused, constructed and handled by individuals and society through brains, minds, systems and cultures. For the authors of this paper, it offers a framework for thinking about clinical practice, social care and education of people with autism.

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