

Cognitive Style, Spirituality and Religious Understanding: The Case of Autism

Dr Quinton Deeley

People with autistic spectrum disorders (ASDs), such as Asperger syndrome or high functioning autism, present with difficulties in social understanding (including ‘theory of mind’), and restricted and repetitive interests. Theory of mind or ‘mentalizing’ describes the ability to understand the mental states (beliefs, desires, intentions) of others, including human or quasi-human agents in stories. Hence, it is a prerequisite for understanding religious narratives (for example, scriptures). Also, the restricted interests of people with autistic disorders are experienced as uniquely preoccupying and meaningful, and often involve non-social topics. Hence, the combination of: 1) mentalizing deficits, and 2) non-social restricted interests would be predicted to affect the religious and/or spiritual understanding, interests, and sensibility of people with ASD. This article considers these possibilities and proposes that further re- search is necessary to understand how the cognitive style of people with ASDs affects their discernments of meaning and value in life.

KEYWORDS autism, theory of mind, religion, cognitive styles

Autistic spectrum disorder (ASD, comprising autism and Asperger syndrome) is a highly heritable neurodevelopmental disorder affecting approximately 60 to 100 per 10,000 people (Chakrabarti and Fombonne, 2001; Baird et al., 2006). ASD is characterized by impairments in reciprocal social interaction, understanding, and communication, and a restricted repertoire of interests, behaviours, and activities (World Health Organization [WHO], 1993; American Psychiatric Association [APA], 1994). ASDs are heterogeneous; for example, people with autism have developmental language delay (and some also have a learning disability), whereas people with Asperger’s syndrome do not.

The heterogeneity of ASDs extends into the degree to which particular features are present—for example, problems with understanding and empathizing with the perspective and experience of others, alexithymia (difficulty in describing emotions), egocentricity, and restricted interests and repetitive behaviours. The fact of this heterogeneity - in other words, that individuals who fulfil the diagnostic criteria for an ASD may considerably differ from one another in the extent to which a given trait is present - has important implications for understanding the religious cognition,

experience, and spirituality of people with ASDs. In particular, it should lead to considerable caution in generalizing about the spirituality of people with autism. In the absence of a substantive body of research that could demonstrate the range and forms of spirituality in people with ASDs, I will extrapolate on the basis of current knowledge to consider how the presence of autistic traits might constrain the variation in spirituality of people with ASDs. I will mainly focus on 'high functioning' forms of ASD, such as Asperger's syndrome and high-functioning autism, on the grounds that the presence of learning disability introduces additional constraints on cognition, which makes it harder to understand the specific influence of autistic traits on religious understanding.

To begin, let us consider theory of mind, which is also referred to as mentalizing or perspective taking. These terms refer to the ability to interpret the behaviour of others as determined by their beliefs, desires, and mental states. Mentalizing abilities are impaired in people with ASDs, as demonstrated in both children and adults across a variety of tasks (Frith, 1996). Intact mentalizing abilities are essential to understanding symbolic culture, much of which concerns the actions and intentions of imagined agents (in myth, story, or scripture, for example), and as such requires an ability to interpret the behaviour of story protagonists as determined by their beliefs, goals, and other mental states (Deeley, 2004; 2006). Consequently, we might expect that impairments in mentalizing would be associated with an inability to understand references to religiously conceived agents, such as God, Jesus, Prophets, Saints, or Jinn. At one level, difficulties may arise from the levels of intentionality present in religious narratives. For example, understanding the statement 'Peter loves Jesus' involves representing one level of intentionality, while the story of Peter denying Jesus three times involves at least two levels of intentionality - Peter loved Jesus, but denied associating with him to the guards because he was frightened of the consequences. In fact, hearing this story may require, and may certainly engage, additional levels of intentionality if the point of view of the guards is represented:

(The guards believe that Peter does not know Jesus, but Peter is only pretending not to know Jesus, and really Peter knows and loves Jesus).

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Attempts to specify formally the levels of intentionality of stories like this only serve to illustrate the complexity of intuitive mentalizing that is taken for granted in understanding narratives, whether religious or not.

In addition to difficulties with representing levels of intentionality, people with autism commonly display problems with central coherence across a variety of tasks, which means that they tend to notice or focus on details rather than the overall meaning of informational sets compared to non- autistic individuals (Happe and Frith, 2006). Also, people with ASDs present with executive problems, which refers to the set of abilities necessary to assign meaning and relevance to stimuli in a flexible manner to facilitate adaptive responses to the environment (Frith, 1996). Taken together, lack of central coherence and executive problems may create special difficulties in extracting the

point or gist from complex sequences of information, such as religious narratives. If we also bear in mind that people with autism have a tendency to literal and concrete interpretations of metaphoric or figurative uses of language (Frith and Happe, 2005), then we can see that numerous features of autism may influence the sense that can be made of agentive representations in religious discourse. Nevertheless, this does not necessarily imply that no sense can be made of religious discourse or items within religious discourse.

For example, a character in one of Aristophanes' plays says that rain is caused by Zeus urinating through a sieve (The Clouds, Aristophanes (2002), example originally cited in Bowker and Deeley [1995]). As an explanation of rainfall, it has something to commend it. It can, for example, account for the periodicity of rainfall and the separation between raindrops. In fact, while understanding this proposition requires a capacity for agentive representation, it functions more as an explanation of an observed physical phenomenon; in other words, it functions at one level as a causal theory, and at another level - in the context of the play - as a joke. The level of agentive representation required to understand the proposition at a literal level is limited; no beliefs or desires of Zeus are invoked, and as such the proposition - as a causal theory - is likely to be readily understood by people with high functioning forms of autism.

Let us consider a different representation of divine agency, God's answer to Job:

'Then the Lord answered Job out of the whirlwind... Where wast thou when I laid the foundations of the earth? Declare if thou hast understanding'. (38:1, 4)

Ostensibly, this might be taken to have the same logical form, to be the same kind of proposition, as that relating to Zeus and rainfall; Zeus causes rainfall in the aforementioned manner, and God creates the earth by laying foundation stones. Both are agents who act on or in the world.

Some are certainly inclined to interpret this passage as a quite literal description of God's causal influence over natural processes; for example, ChristianAnswers.net discusses this passage under the heading, 'Does God control the weather? Does He send deadly storms?' Yet there are of course other potential readings of this passage, which may even call its status as a causal explanation into doubt. Understanding the passage in the context of the book of Job requires a capacity for empathizing with Job's predicament, how suffering can befall a just man, and how a question about the causes of suffering is answered with a poem about the majesty and mystery of Creation. God's answer to Job may even be a non-explanation, a moment when theism hovers on the brink of deconstructing itself into a recognition of the terrible beauty, and mystery, of existence. As Ricoeur (2004) put it, the revelation at the end of the book of Job offers 'nothing that could be considered as a response to the problem of suffering and death, nothing that could be used as a justification for God in a theodicy. On the contrary, he spoke of an order that was alien to man, of that which is beyond the limit of human finitude' (456). But in considering these possibilities, we are holding different levels and types of representation in tension - the intentionality of Job, and the inscrutability (the non-intentionality) of God; the causal agentive role of God as source of the universe, and the non-agentive role of a God who does not, or cannot, intervene to prevent suffering.

Would we expect people with ASDs of normal intelligence to understand, or sense, the resonant ambiguities of Job? Given the cognitive style of people with autism, my prediction would be that the text is more likely to be understood as it was on ChristianAnswers.net - in other words, as containing claims about the causative influence of God on natural processes such as the weather. The cognitive style of people with ASDs would, in other words, tend to limit their engagement with the 'higher order' complexities of theistic belief that the book explores. If so, we would have a range of concrete interpretations that overlaps with those of some normal individuals, such as the authors of ChristianAnswers.net (assuming they are not autistic).

The examples from Aristophanes and Job underline the fact that the meanings of religious imagery, language, and other symbolic forms are a product of interpretation. In social anthropology, intellectualist theories of symbolism emphasize the explanatory role of religious symbolic forms and practices; the cognitive style of people with ASDs therefore suggests that they would be natural intellectualists, tending to construe religious propositions as literal explanations of some phenomenon or other. This orientation has affinities with the work of theologians such as John Polkinghorne (2007), in which propositions about God interdigitate with propositions from physics, such that both seem designed to render the world intelligible as part of an ordered, overarching explanatory system. Expressivist theories of symbolism, by contrast, emphasize quite different properties of symbolic forms. Clifford Geertz (see interview with Geertz in Miller [2003]) illustrated expressivist theories by quoting an observation of Suzanne Langer about the Hopi rain dance: Do the Hopi perform a rain dance to make it rain, or do they perform a rain dance because of the central importance of rain to their whole way of life? Expressivists emphasize the latter dimension of symbolic forms - symbolic forms express the value invested in their intentional content, their meaning, so that the most central features of our lives do not go unacknowledged or unremarked, even in cases where they are more mysterious than understood. Could people with ASDs engage with symbolic forms in this way? If they could, they would be demonstrating a capacity for forms of understanding and experience that seem much closer to what is now meant by the term spirituality. That is, spirituality seems to refer to global attributions of meaning and value to existence, the sense and quality of relationship between the self, others, and the world.

What features, then, of ASDs may affect the capacity to attribute meaning and value to existence? One feature that may be relevant is the restricted interests of people with ASD, which are experienced as uniquely preoccupying and meaningful, and often involve non-social topics (plastic surfaces in a room, car number (license) plates, timetables, astrophysics). In the presence of intensely preoccupying restricted interests, it is not clear to what extent attention can be diverted to other features of existence (unless the question of the broader meanings of existence become the focus of restricted interest). The question of restricted interests also raises a phenomenological question about the quality of interest or meaning that people with ASDs invest in their topics of interest. The heightened sense of meaning evoked by religious symbolism or practice seems to involve a capacity to form emotionally salient connotative or associative linkages between diverse aspects of experience and religious symbols and practices (Deeley, 2004). The sense of meaning is conjoined

with emotion and perception in ways that creatively link individual biography with shared images and practices. Is this a feature of meaningful experience in people with autism? Difficulties with meta-representation, cognitive flexibility, empathizing, and alexithymia may profoundly shape the forms of meaningful experience of people with autism. For example, the topics that form the foci of restricted interests in people with autism may be experienced not in a loosely connotative way, but as much more encapsulated semantic fields that are nonetheless intensely interesting - such as the relationships between numbers in a mathematical proof. If so, this has potentially profound implications for construal of ultimate concern and meaning in people with autism. At an extreme, for example, the implication may be that representations of self and others are absent from discernments of what is meaningful for at least some people with autism.

In summary, the heterogeneity of autistic traits cautions against simple generalizations about spirituality in people with autism, particularly in the absence of research on this topic. This heterogeneity might lead us to expect a considerable overlap with forms of religious and spiritual understanding and experience in the general population. Nevertheless, the intersection of marked autistic traits in a single individual might lead us to expect a highly distinctive sensibility, which is unlikely to support more typical forms of religiosity or spirituality. The ultimate concern, or most meaningful experience, of such an individual might involve a deeply preoccupying closed field of semantic relationship, from which representations of self and other, and metaphoric or connotative linkages between the individual and collective, are absent. Can this be spirituality? This is a question for further research and reflection, in which the voices of those with autistic disorders will be of central importance.

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