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## Normal and otherwise

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To make sense of the range of behaviours that make autism distinct we need to make some sense of the range of behaviours from which we are distinguishing it. In Durham this year, Marc Segar and I both addressed the question of normality. Segar and I agree, I think, that ordinary folk display a multiplicity and duplicity which are distinguished by their absence in autism. A main theme of my paper is that normal is not necessarily wonderful.

His list of the rules of normal behaviour to help his fellow sufferers<sup>1</sup> is both very long (steadily growing, I believe) and full of provisos and exceptions. We regularly operate in a social environment that is both multifarious and inconsistent. The impossibility of following all these rules at once is obvious - which perhaps points to an explanation for the acquisition of a "drive for central coherence" among the normal but not the autistic population<sup>2</sup>.

The bifurcation essential to the normal progress towards multiplicity may be extreme difficulty in the autistic condition<sup>3</sup>. Instead of branching into complexity the interest systems of individuals with autism tend towards attention tunnelling, or *monotropism* (see table 1 for an outline of our model<sup>4</sup>). Donna Williams's analogy for this contrast between herself and ordinary people is that of a busy department store, which in her case can only open one department at a time.<sup>5</sup> To have many interests concurrently active is the norm, we call this *polytropism*. It is our way of coping with a complex,

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<sup>1</sup> Available from The Early Years Diagnostic Centre.

<sup>2</sup> see Frith, Happe

<sup>3</sup> Most of these points are made at greater length, and with greater explicit justification in the series of speculative papers which have resulted from successive Durham conferences. See bibliography.

<sup>4</sup> This outline is by my colleague, Mike Lesser, without whom this account of mind would still be floundering.

<sup>5</sup> Somebody Somewhere, Williams 1994.

changing, and only partially predictable environment: it involves spreading our supply of attention thin so as to maintain a degree of generalised readiness. Even the most flexible among us can find this multiply divided attention quite strenuous - we tend to seek recreation in activities which require a relatively narrow focus.

A well recognised marker of the distinction between autistic and non-autistic populations is use of language. I believe that autistic difficulties with language are critically worsened by a pervasive but little noticed aspect of ordinary practice: we use language as a tool for manipulating interest systems. We play with it upon each others' capacities for multiplicity, upon our acceptance of change and diversity. For language is meant to get into other people's heads and do things there. If, as Kanner insisted, resistance to change is a central feature of the autistic condition, then it's no wonder that people with that problem can find speech aversive. To engage successfully in conversation is to accept being on the receiving end: we take turns (like any precept, this is often violated in practice).

Segar's, Williams', Grandin's and others' willingness to make efforts on behalf of others, and their recognition of others people's needs (along with personal observations of other individuals, see Murray 1995) - demonstrate that empathy is certainly possible in a person with autism. Segar says his 'primary concern is for other people with his condition to have free access to his work'. It seems that these people may have difficulty acquiring an awareness of other people's needs or of what to do about those needs. But once that awareness dawns, especially vis a vis the suffering their fellows may be experiencing, then an open and generous spirited desire to help may spring up.

What is it like to be "aware" of another person's needs? How is one supposed to respond? If no emotion is involved then interest is insufficiently aroused for clear awareness to be possible: in our model all aroused interests are emotionally charged. I suggest that becoming aware of another's needs in most circumstances involves experiencing a change of emotional state, the acceptance of new, alien, feeling (not necessarily in place of one's former state, but alongside it). So, Kanner's resistance to

change may be relevant once more. The strange feeling may be uncomfortable, it may be invasive: it may feel overwhelmingly powerful without ever being identified as an emotion of any particular kind. Or its high profile may be misunderstood as anger, thus conflating eg anxiety, emphasis, excitement, and hurry<sup>6</sup>. If, on the other hand, the emotion brought about by recognition of another's needs or wants is not alien - for example if the people concerned have a common goal - then parties with autism may be able to cope with others' feelings, and be as aware as anyone.

Table 1: A Model of Mind

The model is based on the concept of an *interest*. The word is used with its everyday meaning. It has however the implication of *concern* rather than *advantage*. (Sadly all that interests us is not in our interest.)

- Murray and Lesser argue that the quotidian mind is apparently occupied with interests and that these interests could be said to be competing for attention.
- They observe that interests may be more less aroused.
- They observe that interests are aroused both by sensory input and, to a greater or lesser degree, each other.
- Finally they observe that in everyday life expression of an interest tends to lower its arousal.
- They propose that mind may be viewed as a system of competing interests and that this system could have emergent properties. This is to say the output of the system need bear no simple relationship to the input.

This system was expressed in a spatially discretized differential equation. The equation was implemented as a computer program in C language. It was run on a Cray computer at the, then, SERC Atlas Computer Centre Didcot Oxon. and on a MasPar multi CPU array at the NASA Goddard Jet Propulsion Laboratories Washington DC. Visualisations of the data produced by these computer simulations demonstrated that the system did indeed have emergent properties. Which is to say that the model would not only produce interests that were not present in its initial state, but that it would also produce interests that had no immediate connection with any other interests. This can be viewed as analogous to the creative function in a human mind.

<sup>6</sup> Op.cit., p.114.



Powell and Jordan's summary of the common thread between the several different ways of approaching autism and learning is this: 'learning in pupils with autism can be greatly enhanced if the tasks chosen are highly motivating for both staff and pupils and can be enjoyed together. That seems to be the real therapeutic context in which the pupil can experience that sharing of emotion that has not occurred naturally and spontaneously in the course of early development.' (p.167)

I believe the discomfort of change for individuals with autism is a consequence of their being attention-tunnelled or monotropic - it's a lurch for them to be precipitated into a new tunnel. It makes them feel bad. Therefore engaging with them on the basis of their own interests is making it much more comfortable for them than bringing your own pressing interests to bear. In the long run a more accommodating, and more confident, individual may result.

Generating mutual good feeling is particularly valuable in autism. If we can do that, though their tendency to monotropism will remain, individuals with autism may begin to respond to other people's interests appropriately. They may pay enough attention to other people to get some clues about how to respond. Another way of creating in an individual with autism an interest in what other people want is by making sure the individual wants to learn enough to know how to stay out of trouble. Though that may be a route to compliance it is unlikely to generate the spirit of empathy or fellow feeling which other approaches can sometimes claim.

So, what is an 'appropriate response' to an other's interests - the response which we would expect from a socially involved person? Hopefully, its appropriacy will be two-way, satisfying both parties to the discourse by 'feeling right'. It must involve a) being attracted to the same ends as the other, having a common interest with them, and b) showing that, letting it be known in some way. An 'appropriate' response will involve at least behaviours which can be understood by the carer as relevant to their common interest. Nods of the head, body language, eye direction, task execution, can all give clues of this sort<sup>7</sup>, and speech can too. But however

<sup>7</sup> See Gina Davies's chapter in Powell and Jordan, *op.cit.*

assiduously we try to teach those clues, without the experience of community of interest there will be no motivation to employ them spontaneously. To someone who is aware of other people's wants and expectations but does not actually share their interests, then those clues become the tools of deception. To make matters worse, perfect overlap of currently aroused interests between people is very much the exception in daily life: religious worship, sporting spectacles, concerts, films, plays, raves, firework displays, and (on a domestic scale) watching TV may all be occasions for a brief, perfect identity of interest.

An exchange of fellow feeling can be motivating all round, as Golding's piece, 'Beyond Compliance'<sup>8</sup> persuasively argues. Fellow feeling, obviously, is an emotional experience: one in which interests are highly aroused (hopefully without overload), and strong connections can be made. It is desirable not just because it makes everyone feel good but because it helps the individual with autism learn, i.e. take on new information, within the shared attention tunnel. Therefore, teachers as well as carers will reap the benefits when ways of generating willing shared attention are found.

In the opening pages of the collection I have been citing, Jordan and Powell 'suggest that there are four key interconnected features of autistic thinking: firstly the way in which information is perceived, secondly the way in which the world is experienced; thirdly the way in which information is coded, and finally the role of emotion as a context in which those processes may or may not operate' (p.4). These propositions are of quite a different status from Wing's 'triad of impairments' or any of the other lists of indicators for diagnostic purposes. They are propositions which require a phenomenological effort to unpack; I am interested here in making that effort in terms of an interest account of mind, partly because I would like to clarify the role of emotion in our model.

In the rest of this paper I am going to set out the connections between Powell and Jordan's four propositions within the context of our model.

<sup>8</sup> *Op.cit.*



### Perception

As Jordan and Powell rightly point out, 'the relationship between concept and percept is a transactional one; both develop through an interaction with the other'(p.5). In our model perceptions are automatically related to interests via the distribution of attention. Interests are constantly being adjusted by environmental stimuli: their levels of arousal change and their distance matrices, ie. their relationships with other interests, also change. In other words our multiplicity allows for rapid adjustment and flexibility, new perceptual information is swiftly integrated into a very rich and absorbent pre-existing context. That background information is partly culturally determined in all of us ordinary folk, everything we perceive can be named: our interests are interconnected in standard ways through our discourse with other members of society.

The integrative function of an interest system must depend very heavily on the individual's capacity to recognise stable structures in their surroundings. For most of us the common culture supplies a huge stock of such structures. But in a relatively monotropic interest system which has achieved minimal connectivity compared with ours, and which has not been open to modification by other people's expectations, then percepts will have much less scope for integration and be commensurately unlikely to make any sense.

At the same time, because of their potential for very narrow focus, percepts which are within an attention tunnel may be particularly vivid and potent while everything outside it is meaningless and dim. Great inconsistency of perception is often reported in autism<sup>9</sup>. People who are concerned with individuals with autism get used to their occasional very emotional outbursts in response to seemingly minor events. I believe these are a consequence of the great intensity of sensation caused by their superfocussed attention, and the abruptness with which they can experience changes of focus.

<sup>9</sup> O'Neil, Willingham

- To sum up, percepts in autism will tend to be either extremely vivid or dim and blurry, they will also tend to be isolated, disconnected experiences, not integrated or imbued with meaning from other interests and concerns. In Powell and Jordan's terms, 'the physical properties of objects may be more salient than their functional, emotional or social significance.'

### Experiencing the World

Powell and Jordan argue that 'a range of phenomena in autistic thinking and behaving (eg. difficulties in agency, use of pronouns, remembering personal episodes) suggest that the relationship between *self* and *experience* is unique in autism' (pp6-7). I suggest that the normal, non-autistic nature of that relationship is the result of a particular use of ordinary people's capacity for multiplicity. People give accounts of themselves internally, to evoked others, (audiences/witnesses/judges/loved ones) which create (usually, but not essentially, verbal) narratives in which they play a central role<sup>10</sup>. Please see the table for a philosophical perspective on these points.

Those internal performances normally generate both the sense of self and the capacity for reflection and emotional evaluation which Jordan and Powell see as crucially necessary for learning effectively about the world. They do so through the division between a performing self and a responder, which presumably arises out of that internalising of others' feelings which can be so problematic in autism (see above). These stories we tell ourselves (and others) selectively reorganise our memories and put them into a conveniently re-presentable form. This is I think what Marc Segar means by "plot"<sup>11</sup>.

- To sum up, the reason for the lack of a sense of experiencing self is that the idea of self is an epiphenomenon of the performance game. 'Presentation of self in everyday life' is motivated by the awareness of other views than one's own.

<sup>10</sup> Mead, Wollheim

<sup>11</sup> Bartlett



### Memory/information storage

In our model one major difference between autistic and non-autistic information storage is in the isolation, or paucity of connection, of memories stored in monotropic interest systems. Recall that percepts tend not to be integrated or interpreted. When memories are retrieved they will tend to be disconnected from each other and context free, and their retrieval will depend on a highly restricted set of relevant cues. That disconnectedness also accounts for what we tend to characterise as "flatness" or "lack of emotional content" in autistic reports and memories. No extraneous concerns impinge.

As our authors put it, individuals with autism, "may be able to act but not reflect upon that action in such a way as to make it a meaningful learning experience"<sup>12</sup>.

As discussed above, the internal performance before a responding audience which is the essential mechanism of reflection does not spontaneously occur in autism. Therefore, another major difference for autistic people is that memories do not get told and retold, turned into narratives with a central character. They don't get distorted or put into socially available packages. They don't get checked and rechecked in the light of different interests aroused at different times.

The absence of the reflective loop in autism also accounts for a general problem of self-direction which has particular consequences for memory retrieval. Not only will there be few cues but their availability is unlikely to be under the individual's control.

- To sum up, monotropic memories are minimally integrated in the first place, hard to retrieve, and not subject to further integration over time.

<sup>12</sup> Powell and Jordan

Table 2: SELF AND NARRATIVE

#### George Mead

Developing a "complete self" involves "taking the attitudes of the organised social group to which one belongs..." the individual has to "take the attitudes of those about him, especially the roles of those who in some sense control him and on whom he depends" One "has to provoke in oneself responses one might provoke in another"

#### Jean-Paul Sartre

Pre-reflective consciousness is non-thematised, non-narratised, pre-personal.

Reflective consciousness is verbalised, narratised, gives birth to the ego.

The self is an object of consciousness that is born in the act of reflection

In bad faith I pretend to be what I am not, and pretend not to be what I am.

Bad faith is hiding a displeasing truth or presenting as truth a pleasing untruth.

I slide from my being-for-myself to my being-for-others like a waiter getting ready to face the demanding public.

(Summarised by Dr.J.Mason)

#### Re-running the past as narrative

Self-aggrandising

Self-disparaging

Grudge nursing

Remorse

Altering the story to suit the listener

#### Treating the future as narrative

Hope nursing

Anxiety stimulation

Modelling others' responses

Adapting plans to fit others' predicted responses

Addressing false models, predicting responses which do not occur.

Generating half-truths

Disguising true feelings



## Emotion

Jordan and Powell suggest that "although children with autism experience emotions it is less clear that they can... use emotion to evaluate situations and imbue them with personal meaning." (p.9) They go on to cite recent research establishing a connection between emotion and cognition. In our model cognition is always emotional because arousal is inherently emotional - or, from another angle, emotion is inherently attention-grabbing. Even pure interest comes in degrees of intensity, and can be recognised in facial expression, like any other emotion - though unlike most emotions it does not normally overload.

The cognitive act of emotional appraisal which the authors see as of central importance relies on the reflective feedback via the duality of performer/responder roles discussed above. It is essential to attribute a distinction of function to these roles, and play both at once. It may not be essential that those roles should be filled by different personalities but I presume that in the normal case the different functions are established through the awareness of other's feelings discussed above. Jordan and Powell urge that the presence of an actual person to ask questions and promote self-awareness may help to remedy this lack in autism especially with a gradual handing over of that role to the autistic individual as a long-term goal.

The central part emotional evaluation plays in normal thinking consists in finding out how both possibilities and memories feel by "running them" before one's interest system. The same possibility or memory may be run and rerun to check feeling responses at different times. For any emotional appraisal to take place, it is essential to recognise one's feelings as at least pleasing or not pleasing. We know from numerous reports that such identification is often a problem for individuals with autism<sup>13</sup>.

At this point I want to return to what I have called the manipulation of people's interest systems. This is intended to be a factual and not a judgemental description: it means taking hold of other people's interests and attempting to line them up with our

<sup>13</sup> Op cit., p. Williams, op.cit. and 199 Hobson

own. Because of the turn-taking contract adverted to earlier, it also means letting other people take hold of one's own. The nett effect of a successful conversation is to leave both parties with their interest systems reciprocally altered so as to maximise their similarity. It's all very agreeable when it works out, and the feeling states of both parties are in harmony. This has longterm consequences. Those who enter into this game have emotions which are repeatedly tuned to the rest of society's; those who haven't entered the game early find it hard to fit in, even if they want to. What is more, the lack of a reflective loop deprives people with autism of the one device people without autism have for exercising some internal control over their emotions - inadequate though that device is to the task.

- To sum up, in individuals with autism emotions are not integrated, either internally within the individual or externally within society at large. They are not adapted to accommodate other people's and may be hard to recognise both for others and for the individual who is experiencing and expressing them. They are not spread thin, so are liable to overload. And, in the absence of reflection emotions are both outside the individual's control and unavailable for enriching the meanings of their memories.

Sooner or later most individuals with autism have learned enough to want to control their behaviour and their emotions. Segar's rules address these difficulties directly, and so does Jordan and Powell's guidance about how to assist reflection and self-awareness. The emphasis on mutual enjoyment which permeates their collection bears less directly on those difficulties. But it touches the vital issue of motivation, and it can have profound effects on self-esteem and confidence both in oneself and in one's fellows. Stephanie Lord's description of the physical giving of mutual support in a dance and movement context is a wonderfully literal illustration of this process.<sup>14</sup>

People with autism generally have to cope without the rich and ramified support normal mutuality provides, in a world which can be both obnoxious and overwhelming. The fact that they can find other people so difficult does not mean

<sup>14</sup> In ed Powell and Jordan, pp.79-99.

they don't need them. They need friendly companionship from people who are sensitive to their disabling condition and respect their struggle. They need that on a practical level, and they need it on an emotional level.

### **Bibliography**

**Bartlett, Sir Frederic C.** (1932/1995) Remembering: a Study in Experimental and Social Psychology. Cambridge, Cambridge University Press.

**Frith, Uta** (1989) Autism : Explaining the Enigma, Oxford; Blackwell.

**Happe, Francesca** (1994) Autism an Introduction to Psychological Theory, London, UCL Press.

**Goffman, Erving** (1959) The Presentation of Self in Everyday Life, Penguin

**Hobson, R. Peter** (1993) Autism and the Development of Mind London, Erlbaum

**Jordan, Rita R. & Powell, Stuart D.** (1995) Understanding and Teaching Children with Autism. John Wiley & Sons Ltd.

**Mead, George H.** (1934/1968) Mind, Self and Society, Chicago, University of Chicago Press.

**Powell, Stuart D. And Jordan, Rita R.** Eds. (1997) Autism and Learning, David Fulton London.

**Murray, Dinah KC** (1995) "An Autistic Friendship" in Psychological Perspectives in Autism collected papers of proceedings: obtainable from Autism Research Unit, University of Sunderland, SR2 7EE, or from the National Autistic Society, 276 Willesden Lane, London NW2 5RB. See also papers in the 1992, 1993 and 1996 volumes in the same series.

**Sartre, Jean-Paul**,(1943/1956) Being and Nothingness, Penguin.

**Williams, Donna** (1994) Somebody Somewhere, London, Doubleday