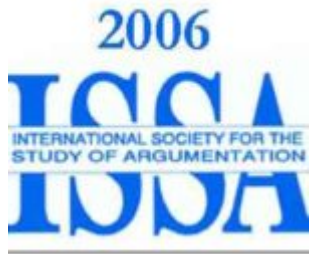# ISSA Proceedings 2006 ~ Arguing With Asperger Syndrome

1. *Introduction*

The study examines the argumentative competencies of people with Asperger syndrome (AS) and compares this with those of normal – or what are called neurotypical (NT) – subjects. To investigate how people with AS recognise, evaluate and engage in argumentation, we have adapted and applied the empirical instrument developed by van Eemeren, Garssen and Meuffels to study the conventional validity of the pragma-dialectical freedom rule (van Eemeren, Garssen & Meuffels 2003a; 2003b; 2005a; 2005b; van Eemeren & Meuffels, 2002). Our paper begins with some background information on Asperger syndrome and how it impacts upon communication and argumentation; then it addresses the research questions and methods used; thirdly, it presents some initial findings; finally, it will conclude with some implications for those people with AS, for those they come into contact with and for the pragma-dialectic model in general.

2. *Asperger Syndrome (AS)*

Asperger Syndrome is a neurological disorder named after Hans Asperger. In 1944, Asperger published a paper that described patterns of behaviour in young men who had normal intelligence and language development, but who also had deficiencies in social and communication skills. Despite being identified in the 1940s, Asperger syndrome (AS) is a relatively new category of developmental disorder, and was only 'officially' recognized in 1994, in the fourth edition of the Diagnostic and Statistical Manual (DSM IV) of the American Psychiatric Association. AS is often associated with what is called the high functioning end of the autistic spectrum (Frith, 1991) although there is considerable debate about whether AS is high-functioning autism, or something else (Frith, 2004). It is generally accepted that AS, like autistic conditions, is a neurologically-based developmental disorder, in which there are deviations in three broad aspects of development: first, social relatedness and social skills; second, impaired communication, and a lack of pragmatic skills in particular; and third, certain behavioural characteristics involving repetitive, or what are called perseverative

features, often accompanied by an intense interest in a limited range of subjects. It is the level of deficiency in these three categories – social-relatedness, communication & behaviour (which Wing (1993) has called the "triad of impairments") – which can range from relatively mild to severe, that defines all of the pervasive developmental disorders, from those with mild AS through to the profoundly autistic.

Recently, however, there has been a move away from defining AS in terms of weaknesses, deficiencies and deviance. For example, Dickerson et al (2005: 20) point out that much research on autism, in general, is "comparative, framed around notions of identifiable 'deficit' in Autism and juxtaposed against assumed 'normal' capabilities". This, they argue, is an unhelpful approach, borne of a diagnostic agenda, focusing on what people with autism cannot do, rather than looking at the ways that they actually deploy communicative skills in interaction – and hence ways that practice can be improved. The study of AS has previously been placed in a negative frame whereby the aspects most worthy of attention are those that are considered not normal. There is little room left for the strengths of the individual to come through, and little opportunity for people with AS to appear as real people in the research as opposed to subjects with a syndrome. Notably, in contrast with the diagnostic DSM IV, Gray and Attwood (1999) offer the 'discovery criteria' that define AS in terms of the strengths of people they call 'Aspies'. But it remains the case that there are clear problems associated with having AS. So while it is not uncommon to see people with AS in mainstream educational or professional settings – and they can hold down jobs and can be quite successful – their social and communicative problems may lead to intense frustration, feelings of worthlessness and social isolation. Estimates of the rates of depression for people with AS or high-functioning autism range from 30% (Wing, 1981) to 37% (Ghaziuddin et al, 1998). Similarly raised rates of other psychiatric disorders have also been found (Ghaziuddin, 2002).

One particularly interesting feature of AS (like other autistic conditions) is the lack of what has been called a 'theory of mind': the ability to understand that others have beliefs, desires and intentions that are different from one's own. What this amounts to is that people with Asperger's find it difficult "to put themselves into another person's shoes and to imagine what their own actions look like and feel like from another person's point of view" (Frith, 2004: 676). While some people with autism may never gain this ability to empathize, people with AS may

be able to develop such an ability. While they lack an inborn ability to perceive the mental or emotional states of others – what Frith has called an "intuitive mentalising" (Frith, 2004: 667) – they can learn and, when conversing, use "an explicit theory of mind to compute effects on the recipient of the[ir] message" (Ibid.). Amongst other things, this means that through treatments such as language-communication therapy – where the implicit rules of interaction are taught explicitly – the disaffection felt by people with AS can be reduced (Ozonoff et al, 2002: 90). The communicative competencies of people with AS are discussed in more detail in the next section

3. *AS and communication*

It is clear from anecdotal and clinical experience, as well as from research, that people with AS display problems with discourse – with language in use. In fact these "communicative problems constitute some of the most significant social handicaps in the syndrome, leading to frustration and distress for the individuals and others" (Adams *et al*, 2002: 680).

These difficulties are displayed in a number of ways: first, *how* they speak. Although people with AS (particularly children) "speak grammatically, they do not always speak appropriately" (Kremer-Sadlik, 2004: 185). They display a number of characteristic features, including "formal pedantic language, odd prosody, peculiar voice characteristics, literal interpretation of meaning, too much or too little talk, lack of cohesion, idiosyncratic use of words and repetitive patterns of speech" (Szatmari, Bartolucci & Brenner, 1989; Gillberg, 1989). Similarly, Frith (1998: 54) has come across complaints about AS speech patterns that suggest they speak in "too much of a monotone, too much like sing-song, too soft, too loud, too fast, too slow, wooden and stilted. This diversity", she argues, suggests that "there is nothing wrong with the voice, only the modulation and the use of the voice in the service of communication."

Second, non-verbal cues can be a problem for people with AS – particularly eye contact, which is noticeably different. Often someone with AS will look *away* when you are talking to them, but will look at you when they are talking to you. This might seem subtle, but it can be very unnerving for neurotypical subjects, who often find themselves feeling uncomfortable or unsure that the person is actually listening to them. Tantam (2003) argues that this is in fact a very profound aspect of AS – people do not have the ability to use gaze as a social cue or to signify attention; this in turn can lead to breakdown in communication with the end

result that the person feels rejected and, after repeated 'failures', can even withdraw from communicating altogether.

Third, as Grice (1975) observed: "Talk is not a series of disconnected remarks." To construct coherent speech effectively, "a speaker needs to construct what he or she knows about the listener's thoughts, knowledge, desires and intentions, in order to tailor the content and other aspects of his or her talk to the listener" (Kremer-Sadlik, 2004: 187). But because of their difficulties perceiving others' intentions and perspectives and their impaired capacity to read the unspoken gestures and nuances in everyday social communication, individuals with AS often respond inappropriately or not at all in interaction. This impairment is noticeable at a number of discursive levels, and appears to be fundamentally related to the theory of mind hypothesis. Pragmatic accounts of communication, such as Grice's, stress "the importance of mentalizing for intentional communication" (Ziatas, Durkin & Pratt, 2003: 75). For example, in a study of conversational implicatures, Surian et al (1996) investigated the ability of children with autism to identify violations of Gricean maxims. They found that the "children with autism able to pass the theory of mind task also did well in identifying violations of Gricean maxims" (Ziatas, Durkin & Pratt, 2003: 76). That said, the overly pendantic style of speech that characterises some people with AS – in which "the speaker conveys more information than the topic and goals of the conversation demand" (Ghaziuddin & Gerstein, 1996) – *does* contravene the Gricean maxims of quantity and (sometimes) relevance.

At a micro level, Happé (1993) looked at the role of theory of mind in understanding similes, metaphors and irony. And the relationship is very clear: "those children who were unable to pass even the first order theory of mind task were able to pass the simile task but not the metaphor or irony tasks. Those able to pass the first order but not the second order theory of mind task were able to complete both the simile and metaphor tasks, and those able to pass both first and second order theory of mind tasks were able to comprehend similes, metaphors and irony" (Ziatas, Durkin & Pratt, 2003: 76).

To summarise, the communicative problems of people with AS centre on pragmatics- on prosody and voice modulation, on recognizing and adhering to Gricean maxims and on recognizing certain tropes such as metaphors and irony.

4. *AS and argumentation*

There does not appear to be any existent research on the argumentation of people with AS, despite the fact that they often find themselves in conflict situations due, in part, to their inability to read social cues accurately. The lack of such research suggests that researchers are unwilling or unable to engage with those with AS and this is supported by the apparent bias in the research literature towards quantitative research and away from qualitative studies. Mercier et al comment on the restricted interests in high functioning persons with pervasive developmental disorders:

When one reviews the literature, it is striking how little use is made of certain methodological approaches in seeking to understand high-functioning autism. In the last few years, populational epidemiology, neuropsychology, and the various branches of neurobiology, especially genetics, have permitted significant advances (for a review, see Bailey et al., 1996; Bryson, 1997; Happé and Frith, 1996). On the other hand, qualitative approaches linked to psychosocial research and based on methods such as in-depth interviews, discourse analysis or case studies have remained greatly underused (Denzin and Lincoln, 1994; Miles and Huberman, 1994). Only a few qualitative studies are to be found in the literature in this field. They primarily deal with case reports (Williams et al., 1996) or with the way families come to terms with autism and with the relations between professionals and parents (Gray, 1993; 1994; 1997). (Mercier, Mottron, & Belleville, 2000: 408)

Another striking characteristic of much of the available research is that it relies much more on the opinions and views of parents or caregivers than the person(s) with AS themselves. Whilst this may be a result of the difficulties which people with AS have in maintaining social relationships with others, it also suggests that people with AS are not considered capable of speaking up for themselves, or that their accounts are not accepted as reliable unless corroborated by another.

Based on general communicative difficulties, summarised in the preceding section, we expect that people with AS will have argumentative competencies different to neurotypical (NT) people and may not always follow the accepted rules of argumentation. Superficially, we expect that their argumentation will be overly logical and, as Stenning and van Lambalgan (nd: 220) have claimed, driven by "an obsessive attempt to extract exceptionless truth about a complicated world." In their discovery criteria, Attwood and Gray (1999: 2) put it slightly differently, suggesting that AS discourse is often characterised by an "ability to

pursue personal theory or perspective despite conflicting evidence" – which is a nice spin on saying that they may perseverate or just not listen to other people's point of view. Perseverative thoughts – where the person with AS returns to a particular line of thinking unexpectedly or without apparent linking from the directly previous content of conversation, resulting in incohesive communication – may cause particular problems in interaction.

More specifically related to pragma-dialectics, and the pragmatic difficulties in recognising or observing the Gricean maxims, a small amount of other research has been done on the use of assertive speech acts, but none of this relates explicitly to expressing standpoints or advancing argumentation. Ziatas, Durkin & Pratt (2003) for example, studied assertive speech acts produced by children, focusing on assertives that relate closely with a theory of mind. That is: internal reports, expressing emotions, intents & other mental states; attributions, expressing beliefs about another's state; and explanations, expressing reasons or relationships between phenomena. The children with AS used more internal state assertions than the other groups (with autism, SLI & NT), though some of these were inappropriate (echolalia); correspondingly, children with AS used fewer assertions relating to another's mental state ('you're thinking…', 'you don't know…', 'you believe…') than the other groups. Clearly this isn't argumentation, because the discourse didn't take place in a context of disagreement. But these findings – essentially showing the difficulties that people with AS have in discerning another's point of view when it isn't fully externalised – may be significant in studying their argumentation.

Anecdotally, it does appear as though people with AS often lack the necessary social skills to persuade other people. This deficit in interpersonal communication has implications for their ability to function independently in a complex social world where persuasion plays an important role in ensuring that one's needs are met. This may also relate to Michael Gilbert's recent work on emotional argumentation – specifically, the "dissonance between a logical discursive message and the emotional content or context of that message" (2005: 44-45). People with AS seem particularly prone to feeling this dissonance or are unable to understand the emotional perspective of others and hence to decode this dissonance. This seems like it could be a particularly fruitful avenue to explore when analysing the argumentation of AS.

5. *Research questions*

The review of current literature around AS and argumentation has thrown up a series of research questions. They are formulated as questions, rather than hypotheses, due to the exploratory nature of the work. These first two are the focus of work currently in progress:

1. Will AS respondents evaluate speech acts involving *ad hominem* fallacies as less reasonable than non-fallacious speech acts?
2. Does the evaluation of fallacious/non-fallacious speech acts by AS respondents show greater variance than the data of NT respondents?

The next four may be the focus of future work. It seems the main argumentative problems of people with AS are felt during social interaction as a result of inabilities to pick up and/or translate emotional or other pragmatic cues. On this basis:

3. Is AS face-to-face argumentation more or less reasonable than NT participants? In what ways (if any) do AS arguers find face-to-face argumentation problematic?
4. Are AS written arguments (both A1 and A2, in O'Keefe's (1977) terms) more or less reasonable than NT participants? In what ways (if any) do AS arguers find written arguments problematic?
5. Are certain pragma-dialectical rules of reasonableness more problematic (in terms of their recognition and application) for AS arguers?
6. Conversely, are certain pragma-dialectical rules of reasonableness less problematic (in terms of their recognition and application) for AS arguers?

It may be that some rules are easy for Aspies to follow in advancing their own arguments, but very problematic when it comes to the arguments of others. For example, the ambiguity rule or the standpoint rule may not be especially difficult for Aspies to follow: they tend to be very literal, or in the words of Attwood and Gray (1999: 2), to communicate in a style that is "free of hidden meaning or agenda". However, unless the standpoint of the other party is fully externalised, and argument presented in an explicit, accurate and literal way, the application of these rules in context may be difficult.

6. *Methods*

To explore our first two questions, we have taken 12 of the short discourse fragments constructed by van Eemeren, Garssen and Meuffels (2003a; 2003b; 2005a; 2005b) nine of which contain fallacies and three of which do not (see

APPENDIX 1). Respondents were asked to judge the reaction of the antagonist and rate it on a 7 point Likert scale – though, to make the scale was clearer to the AS respondents, the labels were changed slightly from those used in van Eemeren, Garssen and Meuffels' work, to 1 meaning 'entirely unreasonable' to 7 meaning 'entirely reasonable'. The research instrument includes exchanges in three settings: domestic, political and scientific (or academic). For each of these settings there are 4 exchanges: a direct *ad hominem*, an indirect or circumstantial *ad hominem*, a *tu quoque ad hominem* and a non-fallacious standpoint. There is a sizable body of literature summarising the findings of these studies, and it would therefore be interesting to see if these results are replicated for AS respondents.

The second group of questions are for future research – though initial results do suggest some interesting things relating to question 4, on written arguments. Eventually we intend to collect data from face-to-face interviews with AS clients (ASIn) in which they discuss personal histories of communicative problems. We also intend to collect data from focus groups with AS clients (ASFg) where participants will be presented with a series of contentious or perhaps controversial standpoints and asked to evaluate them. These will then be compared to similar focus group sessions with NT subjects (NTFg).

7. *Initial results*

From only three respondents thus far, there are some interesting though extremely tentative findings. The table here shows the average judgements for the three respondents:

Table 1: AS respondents' evaluation of fallacious and non-fallacious exchanges

Respondent	All fallacies	Non-fallacies	Direct fallacies	Indirect fallacies	Tu quoque
1	4.33	7.00	3.00	5.00	5.00
2	4.33	5.67	4.00	4.33	4.67
3	4.11	5.00	3.67	5.00	3.67
Mean	4.26	5.89	3.56	4.78	4.45

Table 1: AS respondents' evaluation of fallacious and non-fallacious exchanges

Given the extremely small n-base, it is not possible to offer any firm conclusions, but the table does suggest three things: first, the respondents do appear to

consider violations of the freedom rule to be less reasonable than non-fallacious responses. However, the fallacious responses, as a whole, were considered to be just this side of reasonable. This is slightly higher than the Amsterdam studies – which found a mean of 3.75. Looking at the three variants of the ad hominem fallacy, the respondents were more critical of the direct or abusive variant than they were of the other two. This finding is in agreement with the findings of the Amsterdam studies, although again our average here is slightly higher than their NT respondents.

But these averages do cover up some significant differences between the three respondents. Respondent 1 – a woman in her early 20s – answered either a 1 or a 7 to every fragment: it was either 'entirely unreasonable' or 'entirely reasonable'. In a follow-up email she said:

I found it difficult to make decisions about degrees of reasonableness. I tend to see things as OK or not OK with no grey areas. I hope that is alright.

Each of the non-fallacious responses she judged correctly (which is why her average is 7), but her judgments of the fallacies were less successful: she thought that 5 of the 9 fallacious responses were 'entirely reasonable' which reduced her average. This was different to the other two respondents – both male, one 21 and the other 18. The judgements of these two respondents had less variance: on only 2 occasions did they judge a fragment to be either a 1 or a 7. This may be due to their respective experiences of AS: both of the men were diagnosed as children, whereas the female was only diagnosed as a young adult. This meant that the two men benefited from specialised schooling. The mother of one of the men wrote to explain that since 2000 her son had been at a school for young people with communication difficulties. He had benefited from having a weekly session with a speech and language therapist, and a lot of work had been done with him "on his social skills and relating to others, not least helping him to appreciate that others have different points of view and that it is right to respect this." Nonetheless, he still found the exercise difficult – he stated at the end that he found it difficult because of the "Lack of facts about the argument". Nevertheless, he still provided more finely graded judgements of the discourse fragments than our first respondent. When the first respondent was asked why she found it difficult and whether there was any problem with the clarity of the questionnaire, her reply was revealing:

In reality if I heard two people having any of the exchanges listed I would probably feel confused as to how they meant it... Were they being aggressive?, joking?, cruel?, friendly? [...] When I was reading person B's responses I struggled to imagine what they meant or why they were saying it in the way they did. The only reasoning I could use to decide whether they were being reasonable or not was to decide whether or not their response was justified given the apparent circumstances [...] I know that people's feelings should be important too, but I could not imagine what the people involved might be feeling given the limited information.

This excerpt is interesting for a number of reasons. It suggests the importance of contextual cues in the way that ordinary language users reconstruct argumentation in order to analyse it. Here she tries to use an explicit theory of mind that she's learnt to try and decide whether B's responses were justified. Emotional cues are one of perhaps many inputs used in this reconstruction, which – in the case of this woman and perhaps people with AS as a whole – is what creates difficulties in judging the reasonableness of certain speech acts.

8. *Conclusion: the study's contribution*

This ongoing study will hopefully contribute to a better understanding of the condition of AS in general; and of the discourse of adults with AS in particular, who tend to be under-represented in the literature. In terms of argumentation theory, our study should be viewed as part of the pragma-dialectical research programme, and will add further detail to the data collected thus far on the conventional validity of the freedom rule. In addition, our results may contribute to the more analytical work by Gilbert (2005) on the emotional content of argumentation and specifically on the role that emotional cues play in ordinary language users' reconstruction of argument. But primarily the study is a practical piece of research- once complete: a list of "guidelines for good arguing" will be produced which will hopefully help people with AS to engage in arguments more appropriately. Therefore this study can be classed as "Action Research" in that the results will hopefully directly benefit the participants themselves and people like them.

Appendix 1

Domestic 1 (direct ad hominem)
A: I think Ford cars drive better; they shoot across the road.

B: How would you know? You don't know the first thing about cars.

Domestic 2 (indirect ad hominem)

A: Mum, I really think you should buy a new camera; the one you have isn't any good.

B: Wouldn't you like that! I bet you just want to get your hands on my old camera.

Domestic 3 (tu quo que ad hominem)

A: I think you'd better not eat so much chocolate; it affects your weight.

B: Look who's talking! Your own tummy is getting bigger and bigger.

Domestic 4 (no fallacy)

A: I think you can safely trust me with that car; my driving is fine.

B: I don't believe a word you're saying! You've borrowed my car twice and both times you've damaged it.

Scientific 1 (direct ad hominem)

A: In my opinion, you have been acting unethically; you failed to inform your patients about what they would be exposed to.

B: What do you know about medical ethics? You are not a medical specialist yourself.

Scientific 2 (indirect ad hominem)

A: In my view, it is highly questionable whether smoking really causes cancer; there are studies which deny it.

B: Do you want me to accept that opinion from you? Everyone knows your research is sponsored by the tobacco industry.

Scientific 3 (tu quo que ad hominem)

A: I believe the way in which you processed your data statistically is not entirely correct; you should have expressed the figures in percentages.

B: You're not being serious! Your own statistics aren't that good either.

Scientific 4 (no fallacy)

A: I believe my scientific integrity to be impeccable; my research has always been honest and sound.

B: Do you really want us to believe you? You have been caught tampering with your research results twice.

Political 1 (direct ad hominem)

A: In my opinion, making people work on a Sunday is terrible – they'll never get any relaxation.

B: But you belong to a religious party! How could you ever objectively assess the

pros and cons of such a decision?

Political 2 (indirect ad hominem)

A: In my view, the best company for improving Social Services is Capita. They are the only contractor in Britain that can handle such an enormous job.

B: Do you really think that we can believe you? It's not a coincidence that you recommend this company – it's owned by your father-in-law.

Political 3 (tu quo que ad hominem)

A: I believe that a minister should not withhold any information from Parliament; this would mean the end of democracy.

B: Of all people, I can't believe you're saying this! You once tried for months to keep a case of subsidy fraud secret.

Political 4 (no fallacy)

A: In my view, we have never used empty election slogans; we have always kept our promises.

B: No one believes you! You promised lower taxes in the last election campaign but people have to pay considerably more taxes since you have come to power.

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