

A Mind-Body Look at the Concept of *Asperger's Syndrome*

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In medicine or psychology, the term 'syndrome' is used to describe a collection of recognizable features that often occur together, where the nature of their relationship is unproven and not defined. *Asperger's Syndrome* (or just Asperger's) refers to such a collection of specific interpersonal traits that in turn cause a recognizable pattern of difficulty in relationships. It is by no means the only pattern of difficulty in relationships, but it is a distinctive one. Later I describe very specifically many defining traits and behaviors, but first I want to, one, briefly place the syndrome in the larger context of human functioning, and two, introduce some relevant fundamental concepts of communication and social relations. (If the reader is less familiar with the pattern, or knowledgeable but curious how I define it, he or she may jump to the second half first, and read the traits in bold.) The descriptions of traits include or imply to some extent ways to lessen the conflict they cause. But it is at the end of the article that I describe what I believe is a way to remedy some of the underlying dynamics.

Asperger's Syndrome is a pattern particularly of interest because, 1) In contrast with most socially difficult behavior, the base traits seem *not* to have the function of protecting the ego, 2) the traits appear very early in life, 3) the traits seem fairly discontinuous with average social behaviors, that is, they seem more than just '*towards one end of the scale,*' 4) the traits are fairly provocative to the sensibilities of others, though never intended to be provocation, 5) the traits exist alongside obvious goodwill and intensely expressed pro-social ideals, 6) the traits usually exist alongside excellent abilities otherwise, 7) the traits have proven difficult to change even when the problem is recognized and intentions to change it are strong, and 8) the traits seem to have a compounding effect, in which the social difficulties caused by the base traits lead to secondary maladaptive attempts at compensation.

Asperger's Syndrome is sometimes referred to as 'high functioning autism,' but I consider that somewhat misleading for the present discussion. Though the prevalence of autism is hotly debated these days, autism is by any rate a fairly rare situation, even if the prevalence is rising somewhat. The strictest definitions of Asperger's Syndrome clearly are intended to link Asperger's to autism, and will describe a small group, about one person in 250, with a very strong preponderance of males. However, popularly, the criteria for Asperger's Syndrome have been loosened somewhat, *because to do so has seemed to be immensely beneficial in understanding the social experience and situation of a larger group of people,* still with a large preponderance of males. **Under these expanded criteria, the term Asperger's Syndrome reflects a rather larger group, perhaps two to three percent of the population.** It is this loosened, 'lay-person's' definition that is used in this article. In this article, no effort is made to tie Asperger's Syndrome to classic autism. If the reader is familiar with the latter, he or she will notice some common elements. It is my view that a few similarities notwithstanding, there are more differences than commonalities. Moreover, life-improvement strategies for classic autism, (based on behavioral conditioning) are of no use, or even inappropriate with Asperger's Syndrome.

Hans Asperger was a German pediatrician who in 1944 described four children he had seen in his practice who had difficulty in integrating themselves socially. The children lacked non-verbal communication skills, failed to demonstrate empathy with their peers, and were physically clumsy. Asperger wrote very precise descriptions but not 'diagnostic criteria' Perhaps this was because he knew recognition of anything human always has a 'feel' to it and cannot be made mechanical. Later, a Dr Gillberg put down Asperger's formulation in criteria form, because that is what the present medical world demands. Gillberg's criteria (perhaps, as suggested above, slightly loosened in practice) are what underpin the lay definition of Asperger's Syndrome. They are presented below to give a reference point. I will just briefly point out, that the term 'inappropriate' is relied upon heavily. Dr Gillberg takes it for granted that the user of his criteria knows 'what' is 'proper.' It has been my intention in the rest of this article to define social norms and social expectations very specifically, describing how they fit into the context of human attachment and enjoyment, and avoiding reference to the concept of 'propriety'.

Gillberg's Criteria For Asperger's Syndrome

Severe impairment in reciprocal social interaction (at least two of the following)

- inability to interact with peers
- lack of desire to interact with peers
- lack of appreciation of social cues
- socially and emotionally inappropriate behavior

All-absorbing narrow interest (at least one of the following)

- exclusion of other activities
- repetitive adherence
- more rote than meaning

Imposition of routines and interests (at least one of the following)

- on self, in aspects of life
- on others

Speech and language problems (at least three of the following)

- delayed development
- superficially perfect expressive language
- Formal, pedantic language
- odd [prosody](#), peculiar voice characteristics
- impairment of comprehension including misinterpretations of literal/implied meanings

Non-verbal communication problems (at least one of the following)

- limited use of gestures
- clumsy/gauche body language
- limited facial expression
- inappropriate expression
- peculiar, stiff gaze

Motor clumsiness: poor performance on neurodevelopmental examination

When the term 'Asperger's' is discussed, even in non-medical settings, the medical concept of diagnosis comes up. I believe that 'diagnosis' as an activity is ill-suited to this syndrome. It results in one, constant battles to keep the diagnostic criteria narrow because 'disease' is supposed to be rare and 'distinct', and two constant efforts to link it to something unambiguously pathological like classic autism. What is beneficial is **recognition**, a broader and more permissive activity. With recognition, there need not be great concern with determining a cut-off point in severity. Many have reported feeling relieved at the 'diagnosis' of Asperger's but I believe it is mostly the recognition and validation that is longed for.

On the topic of recognition, it is clear to me that the concept of Asperger's Syndrome is the *outsider point-of-view*. **That is, it is the point-of-view of men and women who do not have this syndrome (collection of traits.)** I say this not to contest the accuracy of the descriptions, or the implication that these traits represent a problem in living. Rather I say it to set the stage for a rapprochement between the 'inside' and 'outside' points of view. **I have struggled with these traits from the inside personally, and from the outside as a therapist.** I view the situation as changeable but not on a casual basis. I am not attempting to present a comprehensive inside point of view either. That would be lengthy, less concrete, and likely to lose the interest of 'outsiders.'

From a mind-body point-of-view, it is essential to recognize the physical clumsiness that accompanies the social effects of this syndrome. **The balance, fine motor, and coordination difficulties are not co-incidental.** This was an essential component of Dr. Asperger's formulation, and as one can see from the list above, Dr Gillberg has retained it.

The American Psychiatric Association (APA) has in both DSM-TR IV and DSM-V been silent on this aspect (as well as fairly restrictive and narrow in criteria.) In fact, in DSM V, Asperger's has been removed as a distinct entity and included in 'Autism Spectrum Disorder.' Notably, however, sensory issues have now been included. Still, there a disregard of what happens below the neck, and true of all DSM categories, there is no model of human functioning to begin with.

It is my opinion, that all the observed features of Asperger's Syndrome derive, at bottom, from having distinctly less access than average to one's sensation, emotions, and desires. This dominates the psychology of the person, of course, but *at base it is a neuro-muscular situation*. The neurological contribution is generally recognized by mainstream investigators, but the muscular aspect much less so. The body that carries Asperger's Syndrome usually has a great many tight muscular spasticities, and opposing great muscular laxities, especially in the small muscles around the joints, and in the face. Males, having greater muscle mass, exhibit these effects more strongly. Male and female brain differences (essentially testosterone-bathed and non-testosterone-bathed brain differences) are being sorted out at this time, but the brain, as always, is both the map and the territory. By the way, upset, agitation, unease, shame and anxiety, while they are motivations for action at times, are not feelings and desires in the sense meant above.

Of course suffering is also placed under the heading of feelings, and with Asperger's suffering, and its cousin upset, is often plentiful. The suffering often is accompanied by the development of spiritual nature which discerning others may notice and correctly identify as the core of the person. So, by referencing low emotion and desire, no diminishment of the humanity of the person is intended

As mentioned above, I will first discuss some ideas about communication, social norms, empathy, mental processing, and behavioral rigidity, where the difficulties are said to lie. Next I briefly discuss hypersensitivity and differences in the pleasure function, which while less recognized, are central to

understanding the situation. Then I will discuss many 'real-life' traits that flesh out the picture, but not to aid labeling, but to place these traits in a context of goodwill and striving for good relationships. Finally I discuss some solutions and strategies.

On the internet and in the literature, men and women who demonstrate Asperger traits are often called 'aspies' (abbreviated 'AS') and men and women without these traits (outsiders) are called 'neuro-typicals' (abbreviated as 'NT'). I have had reservations about adopting these terms, labeling having the drawbacks that it does. However, it has become clear that, especially in giving examples of the traits in question, clarity is greatly improved, and so from this point on, I do sometimes use those terms.

Relevant Aspects of Communication

Communication is often said to consist of two parts or channels, verbal (word-choice) and non-verbal (body language). **I believe this is incomplete.** Body language, just like word-choice, can be ambiguous, and needs something else to place its 'register.' Sometimes that something else is word-choice, but not uncommonly body-language and word-choice together are still ambiguous, and understanding requires a third channel. **That third channel is direct sensing, of both the feeling of others, and one's own feelings.** Now it may quickly be countered that what seems to be direct sensing is just subliminal perception of body-language. But if this is the case, why is body-language never clear with Asperger's Syndrome, even when Asperger's is known to provide a giftedness in noticing detail? Now direct sensing will be very general, but it seems to 'turn on' the perception of many nuances in body language and word choice.

Moreover, communication conveys two distinctly different types of things, feeling and information. Feeling can be 'informationalized', and while something is thereby gained, something is also lost. Communication varies in the relative proportions of feeling and information. Small-talk is mostly feeling and little information; a phone directory is all information and no feeling. Informational exchange depends more on word choice. Feeling exchange depends more on body language and direct-sensing. Word choice can be wrangled to convey more feeling. This is called poetry. Written poetry is notoriously ambiguous however, because direct sensing and body language are not available. For this reason, live poetry readings are popular (at least among poetry lovers.)

Another important distinction of communication is between three things, 1) the literal, 2) a code and 3) symbolism. For instance, everyone living far enough away from the equator knows what an actual snowball is. This is the *literal*, and there is almost never a misunderstanding. If I have a project going on that I want to disguise, I might call it 'Operation Snowball.' and that is a *code*. Again real codes are unknown to most people, but when known, they rarely provide room for misunderstanding. But if I am getting overwhelmed at my job, I might say, "My workload is snowballing" This is *symbolism*. The literal and a code are mostly just information, but symbolism depends on feeling. That is, it is the *manner* in which a snowball becomes larger when rolled which makes the symbolism compelling. This depends on feeling. Now a symbolic phrase like that is often common enough that it has become a cliché, that is, a symbol has become a code. But usually symbolism varies subtly from situation to situation, and is not a true code. That is, the meaning actually changes slightly, and to accurately discern the meaning a contextual 'key' is needed.

In body language, it is more the manner of movement than exact positioning of any body part. American Sign Language is a *code* using the body, wherein the *manner* of movement is not strictly required, just the *final position*. In body-language the opposite is the case. For instance, waving the arm over the head can mean <Hello> or <This is the Spot> or <Help me I'm drowning!> What is relevant is whether the arm movement was made in an easy, matter-of-fact, or frantic manner. Manner is basically a felt thing, even if, in its extremes, it can

become an observable thing. (Of course, in practice, sign language blends the code with body language, and many signs derive from body language.)

Another important distinction within the realm of word choice is between denotation and connotation.

Denotation is about information, connotation about feeling and nuance. There are some words for instance, that are considered formal or archaic, and are not used in most situations (by neuro-typicals), even though the denotation would be spot on, because they would *feel* wrong in the context. However, standard dictionaries only handle denotation because connotation varies slightly from person-to-person and place to place.

Finally, few words are meant to be the final words on anything. When excited, or in casual contexts people often say one thing and then quickly modify it, take it back, contradict themselves, change their minds, change their positions, use impressionistic speech, or use ironic speech. Words are used like a paintbrush where different strokes overlap, blend, or cover previous strokes, this in the service of building up an image or picture. This works by affecting the listener. That is, it is an affective or emotional process, not an informational one. It is quite an inexact process, but considered quite legitimate, at least among neuro-typicals. It has nothing to do with dishonesty.

Relevant Aspects of Social Norms

Social norms are informal limits on behavior that help the group feel comfortable and relaxed. Violating a social norm may not constitute a violation of another's rights, but it is disturbing. While there may at times be good reason to violate a social norm, frequent accidental violation of social norms is clearly in no one's interest.

However, social norms are far from fixed, even in the same social group. *That is, they are very context-specific.* For instance hugging a stranger in English class violates a social norm, but hugging may in fact be the norm with the same stranger when a late campfire at the beach is breaking up. **The difference is how people feel in those situations generally.** Of course what a person feels specifically in a situation is a bottom line on appropriateness, but someone following a social norm is 'given a pass' even when the specific gesture is unwanted, if in the situation generally it would be wanted. In that way, social norms are sometimes considered 'safe havens,' but they cannot be mechanically applied. When a behavior is both violating a social norm and unwanted, and the doer is of an age to 'know better', bad motives are attributed to that person.

Also, social dominance affects the application of social norms, as higher dominance individuals are allowed more liberties. But dominance is another felt, nebulous thing. Moreover, there is a social norm (at least in the United States) that dominance should not be talked about explicitly, which compounds the mystery for the aspie.

The Issues of Empathy, Identification, and Self-Consciousness

Empathy as a term is used to describe many things including goodwill and concern for others. Goodwill and good intentions are rarely in doubt with Asperger's Syndrome. Vigilance and striving for the well-being of others is usually very strong, not only naturally, but also in compensation for the difficulties that will be discussed below.

However, empathy also means *directly* sensing the feelings of the other, or indirectly sensing the feelings of another by how one's own body feels in the presence of another. This provides both knowledge of the feelings of the other person and an inclination to protect and improve his or her feelings. This empathy is not a voluntary act but an involuntary emotional response based not on goodwill but biology.

It is well understood that empathy varies greatly from person to person. Women *in general* will have more empathy than men *in general*. This has to do with the lower average muscular tension in women. Muscle tension decreases biological empathy. **Remember, empathy in this sense is not good-will or pro-social beliefs, it is an automatic propensity toward the entrainment of one's own feelings with the feelings of another.** Concern for the welfare of others functions on many levels, and it can fail on many levels. With Asperger's, empathy fails on the sensing and entrainment level enough that it sometimes gives the impression of being qualitatively absent. (but of course it is not zero, and it can be grown, but that is not simply a matter of attention or willpower.)

The interaction difficulties demonstrated in Asperger's have recently been concentrated into the idea of 'weakness' or 'inability' in forming a *theory of mind*. That is, with Asperger's, one has difficulty knowing what is at the forefront of a neuro-typical person's thoughts. But this is a bidirectional difficulty! Most people have difficulty knowing what is on the mind of the aspie. But somehow the neuro-typical mind is considered the only mind worth knowing, the right mind! But that point made, aspies clearly suffer estrangement from others and impoverishment in relationships due to missing something. What is missed is a *simultaneous* experience of feeling something in common. A purely mental understanding of what another person is feeling can be useful but mostly as an extension of sensed emotional empathy.

Another relevant concept is *identification*. This is an largely unconscious process in which a person likes somebody or something based on that other person or something having either something in common, or something that is desired. A common example is a diehard fan of a sports team. When the team wins, the fan feels competent. When the team loses the fan may block it out, or identify with the high level of skill displayed, etc. One way that people connect is by sharing identifications, such as liking the same team, player or celebrity. Many friendships start by finding a shared 'like' which is often a mutual identification. Finally people can sometimes 'identify' with what others are going through, and this is another basis of empathy. Aspies tend not to identify. This is useful in not getting carried away with a destructive movement, but it also limits bonding on this basis.

Wanting to comfort others flows naturally out of empathy. Knowing how to comfort or help others is one aspect of maturing as a person, but usually it only occurs on a foundation of sensed empathy. Good sensing and the desire to help are separate. Narcissists and psychopaths sense the feelings of others but take advantage. Aspies on the other hand, want to help but have trouble knowing or understanding how others want to be helped. Communication is also severely impacted, because communication has both the function of exchanging information and the function of interacting with the feelings of others. Aspies are masters at the former but challenged by the latter. Moreover, sometimes the exchange of information is at odds with the exchange of feelings of others--this is an interplay which is constantly occurring in human relations. Learning to mix truth and empathy is known as tact.

Self-consciousness is the awareness of how one appears to others, and a tendency to feel embarrassed or ashamed if others disapprove, disrespect, or are offended. *It too is based on sensing*. Young children are not self-conscious, but this starts to change around six. Self-consciousness should not be a sole determiner of social behavior but it is a shaper and influence on social behavior. Self-consciousness can be both paralyzing and neurotic if it has developed in too intolerant or critical an environment. And of course self-consciousness can in everyone be overruled by other strong internal or external motivators. With Asperger's, self-consciousness may be noticeably impaired or seemingly absent. This does not mean that the aspie does not care how others are affected, but rather just that how others are affected is not picked up in *real-time*. This produces problems in the moment, but also longer-term problems in fine-tuning capacities of social behavior. Lack of self-consciousness

may be seen as a quality of resilience, since it permits a person to persist in a new undertaking where he or she is not performing close to others' expectation. This type of persistence is best based on other types of internal strength, however, as lack of self-consciousness is costly in other ways. And finally, low self-consciousness does not protect one from feeling the dislike of others in the long run.

Systematizing

Systematizing is defining the relationships between things by their differences, their similarities, and how they interact. *Consistency is assumed.* The taxonomy of all species in nature is an example of a system, understanding the battles of the civil war is also a system. But also how one is usually promoted in a particular company (relationship of actions to promotion) or cooking an omelet is also a system.

But humans are related not so much by differences and similarities, but by bonding, attachment, desire, personal history, and mood. None of this is consistent. How *people will interact cannot be truly systematized (the system of psychology notwithstanding!)* because it is not predictable. It cannot be set to rules, it can only be 'felt along the way'. Human life is an 'open' system, meaning no amount of observations can lead to rules that fully predict the future. Among other reasons, such rules themselves will influence the social situation, thereby invalidating themselves. This is the dilemma of anyone who tries to navigate social situations strictly by rules, their own or anyone else's.

Empathizing is somewhat inversely related to systematizing because they are not just different ways of thinking but different ways of perceiving. With empathy, one is 'inside' what is happening. Systematizing is taking a position 'outside' what is happening in order to observe. A preoccupation with systems can be an asset except in personal relationships. There it seems cold and off-putting. To systematize one's own relationship is to detach oneself from it. *Clarity is gained, empathy is lost.*

Interest in systems seems to be in two types: 1) Active--entering and participating in a system to influence what happens (ie join a fantasy baseball league, run for office). This will have a competitive feel and *is* a basis for relating to others. 2) Understanding-- more passively, staying outside the system, and just learning everything about a system (knowing the middle names of all US Vice Presidents). The average male brain may not be more *capable* than the female brain in systematizing, but it is certainly more *inclined* to. Women of course participate and master systems in the first (active) sense because that is where the power and rewards of our culture are distributed. Everyday observation (and research) will confirm that women, *in general*, are much less inclined to systematize for the sake of systematizing. Most individuals with Asperger's are male, very probably because lower feeling and impulse exposes the systematizing tendency. But systematizing is not just a hobby to an aspie. It is how life and happiness is pursued. **Because systematizing is built from information, information becomes paramount**

Synchrony versus Reciprocity

Synchrony is a **prompt** and relevant response by others to what we do and say. *Reciprocity* is a balance between give and take over the course of the relationship. Most people actually try to give somewhat more than they take, that is also part of reciprocity. For adults, *attention* comes through both synchrony and reciprocity. To illustrate the difference, it might be useful to describe an experimental study on attachment between infants and mothers.

Mothers and babies were placed in separate rooms but both facing large screens with real-time video feeds of the other. When the mothers responded to what the babies were doing, the babies were delighted, and when the mothers were flat and unresponsive, the babies were upset, both cases just as in face-to-face situations. But here is the point--when two minutes of the mother being adoring and responsive were played back on video, the infants were extremely upset! The mother was giving plenty of positive attention (more than adequate reciprocity), *but it wasn't synchronous*.

In a conversation, an aspie will be concerned with quality and solidness of response as a way of ensuring he or she provides half, if not more of the contributions in the relationship. To attend to this concern, he or she often does two things: One, they often don't answer right away, maybe not for minutes, maybe not for days. Two, when they are ready to respond, it may be a different conversation or different day, but he or she may just drop it in out of context. Besides the minor confusing-ness of this, the *real problem is that this breaks the synchrony*. But it is intended to enhance reciprocity.

Aspies understand reciprocity, but not synchrony. When neuro-typicals ask for attention the aspie usually gives it in an asynchronous or non-interactive manner. For instance, when 'accused' of being uncaring by a partner, the aspie may silently resolve to complete a difficult chore the next day to benefit the neuro-typical. If the neuro-typical was basically checking attachment, he or she will generally be unsatisfied and ask for more attention. The aspie may then feel unappreciated and exploited because they are contributing perhaps well more than half in terms of effort. **Most neuro-typicals desire synchrony more than reciprocity**, at least face-to-face. This is why cocktail parties are popular--nothing much is exchanged except synchrony, which can become the basis to start a relationship. Charming moochers often get away with no reciprocity for quite sometime because they offer synchrony on demand.

Answers versus Responses

An answer consists of information, a response can be an answer, but can be many other things, like a small sound, and exclamation, a gesture, a laugh, a story, etc.... When people are together, generally there is a felt need to acknowledge each other and interact. Once this starts, it can be likened to a continuous flow of responses and responses to responses. Most responses are not very entertaining or profound, but the flow goes on if responses are *roughly* in line to what is being responded to. Often, there is no good answer to the last response, a response that is not an answer would be better for flow and connection. Aspies however, being informational, try to answer everything, even jokes or opinions. Along with a general propensity for long answers, this can interrupt the flow of interaction quite a bit if persistent.

Explicit versus Implicit Mental Processing

Cognition has two very different areas, the conscious or explicit, and the unconscious or implicit. A great deal of research is going into this area now, but it has always been recognized in folk wisdom. Explicit processing is slower, but has the advantage of including all relevant data, more precision, and avoiding contradiction. Implicit processing is faster but may rely on partial data, be vague on details, and be contradictory. Importantly, implicit processing has better access to sensory memory. All people have both types, and they can complement each other well.

But here's the rub--implicit processing makes itself known to the mind of the person via feeling! That is why people at times say, "I just have a feeling about this." or "my gut tells me." Implicit processing is sometimes called 'body-processing.' Of course illogical or biased explicit cognitive processing can masquerade as implicit

processing-- it is not fail-safe. For scientific study or careful analysis, implicit processing may get in the way, or bring a certain laziness to the process. However for personal matters, it is enriching, and, can provide much quicker and better answers.

Aspies tend to rely on explicit processing, even for everyday matters. This means that they have to consider all possibilities, even ones that a neuro-typical would reject instantly as implausible or unlikely. 'Likely' is a feeling concept that has no place in logic. Sometimes aspies find 'unlikely' solutions, everyone else was missing. Other times, aspies are deemed cognitively deficient or 'crazy' for considering very unlikely possibilities.

Central Coherence, and the Gist of Things

There are two elements in understanding anything, the parts and the whole. Stated more colloquially, there are details and there is the big picture. Central coherence is the term that denotes the ability to see the big picture or overall theme. In everyday affairs or communication, the overall theme is the 'gist', and neuro-typicals want to get to it quickly. What's more, they *trust* the gist. In fact, once the theme is 'grasped', if more details are provided, it is confusing and annoying to the neuro-typical, because he or she wants to relax, but more details keep the gist tentative, even if the details turn out to be confirmatory. This trust of generalizations is a feeling function.

Central coherence is necessary for understanding the world, and those with absolutely none of it find it quite disabling. But a strong bias for central coherence actually weakens the handling of details, both in quantity and accuracy. **Aspies generally have a conditional central coherence, that is they recognize the act of summarizing or generalizing, but they don't trust it.** They consider it inaccurate, and possibly consider it dishonest if it was to be put forth as accurate. They especially don't trust 'gut feeling' types of central coherence that are not logically arrived at. **This means that aspies don't know when to stop in providing details.** They tend not to recognize the importance of a 'gist' occurring because to them a gist is incomplete and of no consequence. But as stated above, to a neuro-typical to be barraged by details once a 'gist' has been signaled is irritating. Some neuro-typicals may be quicker to 'gist' than would be optimal, but the fact remains that crossing the 'gist line' is annoying. Aspies have a hard time summarizing. Working backwards from a gist to re-constitute details, as neuro-typicals often do, results in inaccurate recall of the technical aspects of the details, which aspies find quite irritating.

Rigidity, A Misplaced Confidence in Consistency

How we feel affects what we believe at the moment. Because feelings change throughout the day, so does one's point of view, not permanently, but in a line with the state, and then often back again. Some people recognize this in themselves easily, and some people to a much lesser extent. **However, when emotion varies very little, consistency can become a false marker of sincerity and truth.** The trap of mental consistency is the belief that there is one correct position based on adequate information and reflection. Enjoyment requires some variety, but variety has no place in the concept of correctness.

The belief that 'what is right to do' is based on information, drives people with Asperger's Syndrome to think very long and hard about things. This produces many deep thoughtful positions, but they tend to be applied dogmatically. Others disagree, and assert their right to disagree, but the aspie, usually accurately, concludes that he or she has thought the most about a position, and then inaccurately concludes that they must be closest to the truth.

For an aspie, it is taken as a point of personal principle not to yield. To others this rigidity is viewed as a not-so-nice determination to win at all costs, but it is usually not so nefarious. After all, most people are driven to compromise not by any demonstrable proof that the offered compromise is the best way, but rather are driven by the desire “to just get on with it, the matter is too small to spend any more time wrangling.” But an aspie may really feel that his or her personal integrity is at stake. After all, if one cannot decide what is correct and then pursue it consistently, how is one to live? The answer of course, is that one feels one's way along in life, with *help* from the brain to keep it realistic. This is the ultimate resolution for Asperger's Syndrome.

Sensory Defensiveness, Discrimination, and Integration

In an adult, there is expected to be a considerable amount of mediation between stimulus and response. This develops neurologically and psychologically from birth onward in many successive layers. As a culture we emphasize the top most layer of conscious goals and intention, since we believe this is the ultimate determiner of actions. Yet in Asperger's, this top layer is the same as it is for any neuro-typical!

A very fundamental layer of behavior is the connection between a sensory stimulus and a reflexive action. This layer is dominant at birth, but is still very active throughout life. At birth, most sensations cause the infant to alarm and respond with contraction and withdrawal. This is *sensory defensiveness*. With experience in a secure environment, *sensory discrimination* takes place so that by adulthood, much fewer stimuli cause contraction, and a lot more cause pleasure. For instance an adult may experience pleasure with spicy food, whereas infants will cry. The attainment of pleasure keeps the person 'working the edge of sensation,' this is the engine of the development of discrimination. Note that this process has nothing to do with cognitive assessment of the nature or meaning of the stimulus.

Different people have a difference balance between sensory defensiveness and sensory discrimination. There is a very strong correlation between high sensory defensiveness and Asperger's traits, but the two constructs are not identical. It can be readily appreciated however, that high sensory defensiveness greatly interferes with smooth interpersonal interaction, since such interaction is naturally sensory rich. To understand this further, think first of a friendly game of 'catch' with two children throwing a baseball back and forth. An early defensive reflex to the sight of the ball coming towards one is to curl into as small of a space as one can so as to avoid getting hit. A somewhat more discriminative reflex is to block or bat the ball away. An even more discriminative reflex is to desire the ball and instinctively reach for it. None of this has to do with conscious choosing. The defensive child *must consciously* choose to take action to catch the ball and consciously inhibit the reflex to duck or swat it away. This will result in less coordination, less success, and an absence of real pleasure. There will be a mental pleasure of sorts when the defensive child does overcome the difficulty and does catch the ball, but this is less secure, and it doesn't set further discrimination in motion.

High sensory defensiveness impedes sensory integration, which is the ability to work in two sensory channels at the same time in a coordinated way. For instance if I am a building crane operator, I am expected to hear radioed instructions in my ear at the same time that I am feathering the control levers using proprioception. If my sensory integration is low, I must stop everything, 'get what was said' restart the arm movement, stop the arm movement when I hear something else (even if the instruction was not to stop) ask the speaker to repeat what was said, 'get' what was said, start the arm again, etc.. Also because of muscle tightening caused by some level of bodily alarm, my fine motor control will be impaired.

Clearly no one will hire me as a crane operator! However, in a task where steps must be controlled and sequential, like a laboratory experiment, I may excel because of my focus and my understanding of how the steps go together. Where sequences must be conscious, there is an awkwardness in real-time, but also a consciousness of the purpose of steps that may be beneficial. But social interaction is more like a crane than a science lab. Many things are going on at once. It is not necessary to master them all. It is beneficial, however, to coordinate and avoid defensiveness and alarm.

Sensory defensiveness and limitation in sensory integration are adapted to in a variety of ways. Often the terms hypersensitivity and hyposensitivity are used. However sensitivity is a confusing word, since it can imply either high discrimination or high alarm, and which from the previous few paragraphs it can be appreciated that these are largely inversely related. Perhaps more useful terms are *hypo-responsivity* and *hyper-responsivity*. With Asperger's, *useful* sensory intake is generally diminished in some way, in quantity but perhaps more so in quality. This state of affairs can be obscured by the fact that the intellect adapts by learning to make high quality surmises from the sensation that is taken in.

There are two likely possibilities. One, native high responsivity to sensory stimuli leads to blocking and suppression. Or two, native hypo-responsivity leads to up-regulation and distortion. Here is an analogy: If a radio has been tuned to a weak station, the volume dial has likely been turned to the upper limit to get an audible result. If the tuner is turned to a stronger signal, the sound will suddenly be blaring and distorted. Sometime there is a mix of hyper-responsivity in one sensory channel and hypo-responsivity in another channel. This up regulation also sometimes results in a special discriminative or splinter responsivity to certain sensory signals: A vivid depiction (perhaps exaggerated) is Corporal 'Radar' O'Reilly on the TV series M*A*S*H*, who can hear the helicopters five minutes before the neuro-typicals.

There is commonly a *hypo-responsivity to bodily pain*. This suggests less acute sensing as primary. The brain has no reason to up-regulate or amplify pain signals since the informational content is not highly nuanced. This is potentially a strong asset. Severe pain still gets attended to while mid-range or mild pain is tolerated and instrumental behavior can continue. This is potentially a weakness, as mildly or moderately unfavorable situations are not addressed. Mental pain (as from shame, rejection, etc...) is just as acute, however, as it occurs in the same areas of the brain but is not driven by peripheral sensing.

With hyper-responsivity, discrimination is hampered, and stronger stimuli become painful (everyone has a threshold of distress when sensory stimuli becomes strong, but it is lower with Asperger's) Difficulty with eye contact may come from this hyper-responsivity because eye contact is the most stimulating thing of all. Because of mouth responsivity there may be a preference for bland, easily chewed, or familiar foods, and very cold or very hot food may be avoided. Generally, for touch, aspies like strong pressure, little friction, and soft textures. Professional massages may be unnecessarily avoided because it is not known that a good professional massage therapist can adapt techniques-- deep pressure techniques are in fact some of the most effective.

Though many aspies are bothered by sensory defensiveness, often they do not recognize they are bothered. This is not saying that they do not know what is bothering them, but that they do not know that they are bothered (their bodies of course are still actually bothered) This is from the alienation from one's own physical sensations. It leads to looking to other people to determine what should be bothering, and of course this is misleading. Often other people recognize the irritation in the aspie but the aspie denies it, because it is not 'logical' that he or she should be bothered. No social interaction goes well when one or more parties is irritated. Interpersonal defensiveness has many layers, but sensory defensiveness is often the uphill stone that starts the landslide. Also a

great many avoidant and 'bizarre' behaviors (which are alienating to others) are just adaptations to sensory discomfort.

It is in the area of sensory challenges that Asperger's seems most continuous with the autistic spectrum. It is from work with the usually stronger manifestation of sensory sensitivity in the autistic spectrum that this phenomenon is understood in its milder appearance in Asperger's. This brings up the topic of managing tension.

Clumsiness and Dyspraxia

Physical awkwardness is a sensitive topic. It is considered rude or even cruel to bring attention to it. Those who have borne or still bear physical awkwardness (the author is one) often feel shame when evidence of it arises. Physical awkwardness that exists from early childhood onward is a combination of muscle tension and incomplete sensory integration as described above. This is termed dyspraxia.

In concrete physical tasks, full contraction of a muscle undermines sensitivity, balance, and on-the-fly adjustments. If this occurs early in life, along with sensory defensiveness, a mixture of chronically tight over-shortened and chronically lax over-lengthened muscles develops, accompanied by many misaligned joints. This bodily state is reversible, but not by ordinary fitness training traditions. Now the medical establishment, as usual, only has an interest in the severest form of dyspraxia. However, dyspraxia of a less than catastrophic degree is still life-altering. Colloquially, dyspraxia in this range is called clumsiness.

The casual mainstream advice is that people with clumsiness should do work that does not require any 'skillful' physical execution. But this is an inadequate adaptation—what about play, lovemaking, fitness, self-expression, relatedness, or plain joy in living? It is not just elite athletic maneuvers that are undoable, but many tasks of daily living are awkward and have a feeling of struggle. Dyspraxia contributes to an inordinate interest in doing extraordinary things (like being an astronaut etc...) because it makes ordinary things so hard to do.

Dyspraxia not only makes certain tasks hard to execute, but makes it hard to understand how things are done. This leads to the twin limitations of *task avoidance* and *topic avoidance*. Task avoidance is often seen laziness, arrogance, entitlement, attention deficit, or eccentricity. But everyone avoids what is stressful. If moreover, what is stressful for that person is not generally stressful for others, the stressed person may want to hide his or her stress, or may not even be aware they are stressed. But they are still stressed. And neuro-typicals involved will not usually realize he or she is stressed. If an activity is hard in this way, the topic itself also becomes upsetting. For instance many aspies have trouble with housework, and so also have trouble discussing housework. The motive for the avoidance is not to get away with something—most aspies feel guilty about possibly not contributing enough, and this makes these topics even 'hotter'.

Self-consciousness intensifies dyspraxia. Also effort intensifies dyspraxia, especially effort not to be 'clumsy'. Hurry brings on clumsiness in everyone..

Though the following statement may at first seem implausible, the reader is asked to observe the people around him for a time through this lens. **Physical awkwardness is accompanied by social awkwardness, physical grace by social grace. This may not be fair but observation will show it to be true.** Keep in mind that awkwardness can be disguised by avoidance, clever routines, and extensively rehearsing repetitious movements like dance steps or a golf-swing. It is spontaneous movement that is of interest here. Fidgeting is also usually

seen with clumsiness because of the common root of muscle tension.. Muscle tension problems are not unique to Asperger's, but the overall pattern is a strong indication.

Clumsiness is very hard to change but certainly not impossible. Some bodywork traditions aim at just that, and true studio Pilates is an excellent example that I recommend unreservedly. Physical education used to have a secure place in schools because the link between understanding anything and physical flexibility, balance, and movement was well understood, but now the benefits of PE are being forgotten or denied. Of course the approach of PE instructors typically has not been remedial or basic enough to help with Asperger's, and so many aspies have found it an occasion of frustration or humiliation. But in moving away from neuro-muscular training, aspies are actually learning to cut themselves off from the best avenue for durable and *satisfying* change.

Dyspraxia can lead to *task avoidance*, especially tasks that are in the nature of 'chores' or 'duties' because these tend to be the most physical. Aspies may not know why they avoid the things they do, besides a vague anxiety. Aspies usually think about these tasks a great deal and not be aware that by not getting to the hands on completion part, they are essentially not performing the task and are perceived by others as shirking work. This is not laziness! Task avoidance can be subtle or hidden out of shame. A lack of straightforwardness in daily life results that is draining for all parties but it may be hard to put one's finger on exactly what is wrong. It is usually helpful if the aspie can be taken through the steps of the task even with the arms and legs being placed in better positions manually. This should not have to be done for everything, but can 'break the bubble' of avoidance.

Retained Early Reflexes

A human child develops many 'primitive' reflexes in utero that aid in the birth process and the perinatal period. During the first year of life many postural reflexes develop that inhibit primitive reflexes and aid neuro-motor development. Finally about 8 years of age, with optimal motor development, the postural reflexes are suppressed by motor learning in the cerebellum and elsewhere. Traditionally 'little league' sports started about nine years old, although in recent decades this has been pushed much earlier because the child's actual experience has been subordinated to the adult ego's fantasized benefits.

It is not unusual generally for either primitive or postural reflexes, or some combination to be retained, and this is very much more common with Asperger's. This retention interferes greatly with motor tasks, and with learning motor tasks. These early reflexes tend to be 'global' throughout the body, so coordination, motor differentiation, and sensory discrimination is blocked. One result is that it remains hard to commit something to 'motor memory' and complex actions must be 'run' by the cerebral cortex, even after extensive repetition. But such movement is still awkward, uncoordinated, slow, and prone to having steps left out, because it is dependent on concentration. It also puts the person in a position of only being able to do one thing at a time.

With retained reflexes, balance and vestibular function is always hampered. Also children may show various difficulties learning things thought to be non-motor related. Retained reflexes are likely to be behind the sensory integration difficulties described above. While the presence of retained early reflexes in Asperger's is very high, I would not say the two situations are synonymous. The situation can be remediated, but practitioners that work in this area are sparse. I list one organization at the end.

Tension Release and Tension Avoidance

Neuro-muscular tension builds up in all people from minor and major conflicts, frustrations, and sensory stimuli. Psychological tension, where it is felt, is a mental counterpart of this neuro-muscular tension. Tension can be discharged by meaningful self-expression, instrumental activity, exercise, and pleasurable activity. Aspies are less aware of their tension, but of course are affected by it still. Aspies have trouble releasing tension both because they don't recognize it, and chronic muscle tightness. Therefore most aspies find the following three types of tension management by trial and error: concentration, sampling, and stimming, both of which have a small element of choice but which are irresistible in the long run.

Concentration This is a type of attention where one small thing is focused on and all other stimuli in the environment are excluded. Being 'lost in thought' is the hallmark of concentration. Everybody concentrates at times to some extent, but not to the same degree of exclusivity. Concentration probably decreases tension through activation of the dorsal vagal branches of the parasympathetic nervous system. Outside the brain, concentration is a 'freezing' response. Inside the brain, concentration is a rich response of analysis and fantasy. Concentration is an ability that pays large dividends in intellectual undertakings. It is out of place in social contexts. That is why libraries are considered the opposite of social venues.

Concentration can 'follow a trail,' such as reading one paragraph after another in an article but the focus has to be fairly similar. People around us are hard to concentrate upon because they are so multi-modal. People have to be 'taken in' differently, on an impressionistic basis deriving from several sensory inputs at once. An Asperger's trait is difficulty forming an impression.

Aspies often annoy other people by starting to read a newspaper, a piece of mail, or even a food label when an important conversation is happening. Or the aspie may start to concentrate on something going on in the background like construction viewable out the window. It looks like he or she is distracted but it is the opposite of distraction. Neuro-typicals consider this a sign of disrespect or contempt, a sign that the aspie couldn't care less. It is, however, just the opposite, a measure of how the aspie is being affected. For many aspies, concentration is an automatic response to increased tension, so naturally it occurs most just when it 'shouldn't', like during important conversations.

Sampling This is an attentional style where small snippets of attention to the environment are alternated with dissociation. The attention part is used to gather a sample of information and the dissociated part is used to analyze the information and also deal, through fantasy or, with the stimulation experienced. This style may be adaptive when 'taking in' a static inanimate set of conditions. There, little is happening between samples. In an interaction with another person, it is less adaptive.

In a lecture however, sampling still has considerable benefits. There, contextualizing information aids understanding and retention of intellectual knowledge. There is usually enough redundancy to 'fill in' anything that is missed between samples. It has been noted that aspies often proceed as if interaction between people is a series of giving and receiving lectures.

But in a personal relationship, sampling produces real trouble. Say a neuro-typical is speaking across the breakfast table to an aspie about something that is very important to him or her. The aspie pays attention initially but then dissociates or distracts. The aspie usually has sampled sufficiently and usually correctly anticipates the majority of what the neuro-typical will say. The aspie knows that the neuro-typical wants steady attention but

may view this as selfish and possibly boring. In fact, if the aspie kept steady attention, he or she would be over-stimulated and not get 'much' more information.

There are two losses here. One, with sampling, small subtleties are missed even if the basic point is appreciated, and the small subtleties are important in 'getting' a person. Two, taking in the sensory energy over time is a way of being affected by a person, which is separate from being informed by that person. All people want to affect others. Neuro-typicals often want to affect others by their 'presence, as well as their information. To the aspie, the energy and time spent 'processing' *is* attention to the interests of the other. But here what is meant by attention is not 'care' but a continual openness in perception. It is literally 'taking in' somebody or something.

Stimming This is a slang term for physical self-stimulation, such as rubbing the face or head with the hands, stretching the face, picking the nose, rocking, shaking, odd-seeming body movements, throat clearing, humming, or seeking pressure such as crawling under a mattress or heavy covers. Stimming may also have to do with sensory hyposensitivity. It is partly 'awakening' behavior, such as when many people rub a foot that has 'fallen asleep.'

Stimming however, also has the function of release. When tension or autonomic arousal is higher, and releasing the tension through emotional expression or instrumental activity is less available, stimming maneuvers are employed. Stimming is related to the intensity of autonomic arousal, not the affective tone. That is, stimming is the same whether the person is positively excited or negatively upset. Stimming is not related to psychosis (although in psychosis, stimming does increase through the same mechanism) Witnessing stimming is usually annoying to neuro-typicals because they cannot 'place' the action in their own repertoire of actions. Aspies may learn to try to suppress stimming or disguise it as instrumental behavior.

Most stimming is directed at 1) affecting the vestibular system (by stims of or near the ear, or repetitive sudden changes of direction in moving the head), 2) affecting the trigeminal nerve (a largely parasympathetic (calming) cranial nerve that is distributed throughout the forehead, face and throat), or 3) affect the vagus nerve (another parasympathetically-dominant cranial nerve, which has extensive branches but the parts usually stimulated are the branches in the ear and throat.)

Excessive Talking Talking, besides communication, is also release of mental tension in the limbic system. People talk more when excited or stimulated. However, expressive gesture, subtle movement, and goal directed actions are even stronger releases of limbic tension (but it is largely the quality of movement at work here, not sheer quantity.) An aspie may have less capacity to release tension through expressive movement, and so excessive, repetitive, and purposeless talking may become an 'escape valve.' This type of talking is not interactive and so may annoy others. This way of releasing tension can be very habit forming since it is so easy and not hindered by dyspraxia. If it has 'funny' elements to it, it may also draw a type of attention from others that is mistaken for truly positive attention—this is the development of *clowning*.

Naturalness, Correctness, and Trying

Aspies often find themselves trying to do the 'correct thing' socially, contrary to how they are inclined. This is understandable, because their inclination is often not social. For instance when a stranger holds out his hand for a handshake, the aspie may not want to touch the hand, but likely will make him or herself do so because it is the 'correct' thing to do. However this forced action will not have a natural manner to it. In a sense it is the correct thing, but in another sense it is not the desired thing because it is naturalness that is desired. Trying to navigate social situations by willful use of 'rules' increases the stiffness and unnaturalness of actions, which likely disturbs

neuro-typicals in a casual context considerably more than any formal etiquette puts them at ease. 'Trying' can be a great asset in academics and practical problem-solving, but it can increase dyspraxia, and it certainly defeats pleasure and ease in social situations. It is true that almost all families teach young children manners, but in a neuro-typical, this amounts to a 'nudge' or channeling of the underlying inclination.

Pleasure and Pain

It is said by some that all actions are motivated by the prospect of pleasure or the attempt to avoid or reduce pain. While I think this is too simple to explain all of human motivation, I do think it is a useful enough principle for the following point.

Pleasure is about increasing good feeling. Reducing pain is about decreasing bad feeling. They are not symmetrical. Reducing pain does not produce pleasure. Likewise reducing pleasure does not cause pain. Also pleasure might be divided into mental pleasure, and emotional (embodied) pleasure. The two are qualitatively quite different, and *mental pleasure is private and solitary, emotional pleasure can be shared*. In the Asperger's condition, reduction in pain and mental pleasure are intact as motivators, but emotional or bodily pleasure is reduced substantially.

If one cannot derive any pleasure at all from an activity, then it is likely to cause pain at some level. For instance, some people find a three hour opera quite exquisitely pleasurable, and some find it disagreeable. Both aspies and neuro-typicals are among the group that doesn't like opera. But other instances can give rise to divisiveness. For instance, aspies find little pleasure in non-instrumental conversation, *even if they succeed*, and usually the experience is uncomfortable. For neuro-typicals, such casual conversation ranges from very desired to neutral, but not painful. They find, therefore, strong zeal to reduce casual conversation quite odd.

Aspies tend to develop habits and philosophies that encompass the reduction of pain but leave out comfort and the production of pleasure. Neuro-typicals tend to develop habits and philosophies that include both strategies. As mentioned above, it is *severe* bodily pain and mental pain that is targeted for reduction (and prevention), hence the disregard for present comfort. Aspies sometimes develop disdain for typically pleasurable activities because they view the time and resources spent as better employed reducing pain. Aspies and neuro-typicals can be allied around activities that reduce pain, but suddenly adversarial around pleasurable activities.

To Summarize

In Asperger's Syndrome, several elements combine to interfere with connection and understanding: a tight musculature that renders the body a poor internal and external 'antenna,' an overvaluation of the role of information in well-being, low emotional context in which to place information, a strong drive to place information in a non-emotional context (over-systematizing), missing contextual clues in communication, low attunement, loss of synchrony, unappreciated sensory differences, and an overvaluation of consistency. Perhaps secondary to this, a history of misunderstanding and being judged leads to bitterness and suspicion and hostility which causes further rifts which the aspie is at a loss to know how to repair. A vicious circle is maintained. This is not a morally culpable situation, but a biological and social one, that while it is persistent, can be altered.

Generally conflict arises because aspies expect neuro-typicals to do and interpret things the way they do, (and of course vice-versa.) *This is a universal human tendency*. There is no hypocrisy or double standard involved.

Conflict is also increased in those cases where there is a certain drivenness. This seems to take two forms, an obsessive-compulsive style which seems to expect neuro-typicals to 'get out of the way' of what the aspie is doing, and a 'know-it-all' style which seems to expect neuro-typicals to accept all the aspies conclusions, both in substance and implication. Where there is more passivity, there is less conflict, except in romantic and parenting relationships, where 'traits of absence' are more the source of contention.

Asperger's is a pattern of functioning that gives rise to bitter conflict at times because 'what is missing' is missing in real-time interaction, but may be available for analysis. Every part of human interaction, including the feeling part can be 'informationalized' and given as feedback. With Asperger's Syndrome, the person can intellectually understand what other people are telling him or her is the 'problem', perhaps even refining and clarifying the concept! **But this knowledge cannot be implemented 'on the fly'** The fundamental deficit is not a deficit of understanding. Very few good communicators understand what they are doing, they just do it! In fact, trying to communicate entirely consciously would be a detriment

The aspie is often mistakenly accused of ill-will or insincerity because they can state the problem, but he or she ' doesn't do anything about it!' But the efforts to do something 'about it' are usually immense. The problem is that these efforts are usually along the lines of 'systematizing' the feedback, which creates a vicious circle. At some point, the aspie will come to view the intolerance of neuro-typicals as the problem, and there is some basis in this position. However, it is clear to me that there is immense benefit for the aspie in gaining capacity in feeling, desire, and emotional attunement.

Using intellect and explicit processing to manage social situations requires constant alertness and anxiety which is exhausting. It also interferes with prompt synchronous responses, which can give the false impression that there is no intention to respond.

Interpersonal Traits Placed in Context

In this section I am describing several common traits, not in the form of diagnostic criteria, but in the form of 'recognition' elements. These are not at all meant to capture the internal experience of a man or woman with Asperger's (for that there are many excellent 'insider' Asperger books that have come out in the last decade and a half). In fact, as mentioned above, since Asperger's as a construct derives from the neuro-typical point of view, it is impossible to describe traits in this framework without using the internal experience of the neuro-typical as a reference point.

In addition, emphasis is placed on 'traits of intrusion' which show themselves in casual and work relationships. 'Traits of absence' which show themselves more in romantic and parenting relationships, are not listed. To do so would seem less balanced since there is less of an 'aspie side' to these conflicts.

It is well to repeat the truism that no person is a label or list of traits. All generalizations are off the mark in some way when applied to specific situations. The traits listed below are selected to illustrate common areas of conflict in casual interaction. Of course no person has all these traits, and no one trait or small grouping of traits is definitional.

Uncommunicative Eye Contact: In humans, eye contact is the center of the attachment system. In Asperger's Syndrome there is either an avoidance of eye contact (most common) or an unvarying, relative unblinking, staring, constant eye contact (less common). Avoidant eye contact gives an impression of 'having something to

hide', and also eliminates a big channel of communication and trust. Staring eye contact, because of its unchanging nature, is also uncommunicative, and is generally experienced as disturbing on the receiving end.

Difficulty Using Body Language. This comes from lack of contact with the body, and lack of embodied emotion. Body language at best is spontaneous and unconscious. When it is consciously undertaken, it tends to be 'flung', hurried, exaggerated and stereotyped, more in line with a code like hand signals than a demonstration of feeling. Muscular spasticities also contribute, since the *manner* in which he or she moves is less under the person's control.

Decreased Facial Expression: Though lower emotion is an element, the flatness of expression may be increased by neuro-underdevelopment of the facial nerves and hypotonicity of the facial muscles. This is an element also of difficulty reading facial expressions, since we all have trouble interpreting movement in others that we cannot make ourselves. A risk here is that explosions may seemingly come out of nowhere because growing upset was not in evidence to others

Difficulty Interpreting Body Language: While body-language often is simplistically considered a code, when most instances are broken down, very few clear consistent correspondences are found between meaning and static position. That is why books on body-language quickly draw interest but fail to satisfy. The truth is, most body language works by producing a feeling in the receiver's own body.

Not Recognizing 'Yellow Light' Conditions: For instance, if you bore me for five minutes at a party, I may listen politely and make small hints and gestures towards the end of that period that I want to do or talk about something else. If you miss this and continue to bore me for 30 minutes, I may erupt in anger and castigate you. To the aspie, this is dumbfounding: It seems I have suddenly changed on a dime because something I was polite about before suddenly I am not polite about. This is not only failing to understand the hints and non-verbal indications. It is lack of understanding tolerance. **Many things are tolerated for a short time**—loudness, disruptiveness, distractingness, bad jokes, etc.-- because of empathy. Aspies often mistake tolerance for acceptance or approval, because of the belief that something is either 'right' and not criticizable or 'wrong' and should not be permitted at all.

Mistaking Friendliness for Friendship Many people are sincerely friendly, even with, or especially with, people they do not know well. The depth of the feeling is not always proportional to the friendliness which is just an expression of general goodwill. In addition, some will act solicitous toward an upset or 'out of sync' person because they take that person to be in distress (this is especially the case with women). This solicitousness can be mistaken for approval of or request for more of the mis-attuned behavior. A spiral into trouble is easy to foresee.

Hates to be Misunderstood or Not Understood Certainly, nobody likes this. But for an aspie, comprehension is the only connection, so for it to fail is to be ostracized. This can be true even when the other person is friendly and not arguing and the matter trying to be put across is not personal.

Poor at Persuasion Aspies think in terms of the the optimal thing to do, and assume that everyone wants to do the optimal. Persuasion is about tapping in to and understanding the desires of others apart from the merits of what is proposed. Of course persuasion can cross ethical lines, and the aspie take on persuasion is usually that it is dishonest. However, even honest advocacy of any sort relies on understanding the desires and tendencies of the 'audience.' Aspies of course are often found trying to convince others they are right, but in this tend to

trample on the interests and perspectives of others. Aspies sometimes fall into the role of 'anti-persuaders' who make even beneficial undertakings seem unappealing.

Difficulty Following Verbal Instructions Verbal instructions tend to be fairly imprecise in word choice, relying on context and intonation. For instance a neuro-typical brings a box into the house, in sight of the aspie and sets it down on the dining room table. A few minutes later, the neuro-typical asks the aspie, "Would you please take the box to the garage?" Now the aspie knows that in the house there are many boxes, and immediately he or she starts to think of which box might be meant, and the varying implications of bringing the different boxes to the garage. Needless to say, there is no prompt response, which the neuro-typical takes for both unwillingness to help and rudeness. To the neuro-typical, it is obvious that the box he or she just had would be the one of interest, but this is based on feeling. Logic might point to that box but only weakly. Aspies tend to think of all possible meanings of an instruction instead of the probable meaning. The 'command' voice of another can also cause tensing and defeat comprehension.

Confusing Friendliness and Friendship. Generally, for most encounters, strangers act friendly, co-workers act friendly, and friends act friendly. The difference is felt by the participants however, and so strangers do not ask what a friend might go on to ask. This can obscure the boundary. An aspie that is trying to act friendly (and perhaps has been encouraged to do so) may imitate the friendliness observed between two friends and 'presume too much' and be hurtfully rebuffed.

Mistaking Friendliness for Sexual Interest. This is especially difficult for aspie men, who like men generally must make the first unambiguous 'move'. As mentioned in the paragraph above, a woman will tend to show interest in a man that is annoying, with an instinct to soothe. Likewise she will tend to show interest in a man she is sexually attracted to. Many an aspie man has been humiliated making a pass that was completely unwanted.

Only Honor Logically-Pure Rules: Some boundaries or standards are really felt things hard to quite pin down in words, and so when committed to rules, they are inconsistent or incompletely described. Implementing these rules requires understanding of what is really bothersome. Aspies tend to dismiss what is not clear or logical.

Discomfort When Being Served: With Asperger's, it is hard to know what is expected of one in a service situation, because what is expected is knowing what one wants, which is very hard with this Syndrome. Most social occasions involve being served, however, because emotional bonds develop when pleasure is shared.

Seems Insufficiently Moved Emotionally. Where empathy is at the forefront, communication is about *impact*. Where systematizing is at the forefront, communication is about *implication*. Both are needed to address real problems responsibly; neither is morally superior. However, a common transaction is one person telling another person their problems, not to get a solution, but to feel better by the impact on the other. This is a difficult spot for the aspie (and men in general, and many women) who look for implications of things to do to fix it or at least help practically.

Pronouncement-itis A pronouncement is a declaration of the operating principles of a situation or system. Because aspies are understanding the world by systematizing it, they share their experience in pronouncements. Now pronouncements are the format of lectures and textbooks, but can seem impersonal or overbearing in a casual context. It can seem especially unnatural before adulthood. Dr Asperger referred to this as being "a little professor."

Doesn't Let Others 'Save Face'. It is embarrassing (that is, it feels bad) to end up on the losing side of a question or conflict. 'Saving face' is a softening of the blow, and has two aspects: 1) All parties know not to refer to the 'loss' explicitly, and 2) the 'loser' is allowed to revise history a bit to make it appear they were not actually opposed to what eventually happened. This is a small dishonesty that is allowed in polite company. Empathy (and pragmatism!) allows face-saving, but from an informational point-of-view, it contaminates the database and aspies are more dedicated to keeping the record clear and accurate.

Tactlessness: Tact is truth *with* empathy. Saying nothing at times may be best, but it is avoidance and not tact. Tact is an art which varies from person to person. With Asperger's Syndrome, there is usually no avoidance, but also no tact. Where empathy is lacking, some truths sound harsh and jarring, and this impact engenders extra resistance in the listener whatever the accuracy of the observation. Frequently it is believed that the person with Asperger's meant to hurt, but this is untrue. He or she is actually speaking the way they wish to be spoken to—directly and straightforwardly.

Saying Directly to Someone What Others Say Out of Earshot: The underlying belief is that the greatest good comes from the most people having the most information. The feelings of the person seem inadequate reason to leave him or her in the dark. Very occasionally, this can be the right thing to do, but often, to the aspies dismay, the informed person is more angry at him or her than the person originally generating the statements. This is because it is the knowledge that brings the pain. Among neuro-typicals this is a deliberate way to hurt someone, but for an aspie, it is innocent.

Not Respecting Hierarchy: This is often badly mistaken for arrogance or a 'god-complex' A person lower on a hierarchy (younger, less seniority, subordinate position, or lower rank) can at times have better information than someone higher on the hierarchy. If information is all that matters, then indeed that person should be telling others what to do. People with Asperger's rarely become boss, and end up resenting bosses that work less hard, are less intelligent, or less knowledgeable than they are (that is most bosses), because it is illogical.

Extreme Black and White Positions: In an informational world, if something is logically right, it should be permitted without restraint, and if it is logically wrong it should be eliminated entirely. It is using reason as 'razor' By contrast, a gray area is a partial allowing of something as long as it doesn't get out of hand. This arises often out of the understanding that one feels different about a matter when directly affected than when viewing it from the outside.

Disputes the Preference or Likes of Others: Preferences are both feelings and judgments about the fitness of an option. If one misses the feeling part and recognizes only the judgment, then it is logical to think there are single 'best' preferences based on knowledge and understanding. What is missed is that preferences are about pleasure, sensation, emotion, and personal history, which of course vary from person to person. Some people don't mind debating their judgments (this can't be assumed) but no one likes to have to debate his or her feelings.

Insists Others Do Something His or Her Way. This comes mainly from believing he or she knows the best way, and wanting to 'complete' a system. The hesitancy of others is viewed as a 'mistake,' not other people protecting their integrity by not doing what they don't to do. The aspie is not trying to dominate or use others.

Factual Literalness; There can be confusion with small inaccuracies or imprecision in instructions despite many other clarifying cues. For instance, a neuro-typical points to a pencil and says, "hand me that pen there" while holding paper and obviously wanting to write and there is no other writing instrument nearby. The aspie may well be paralyzed or get up and go look for an actual pen elsewhere. Sometimes when an action that has

been done many times before is called for in a sequence, and aspie may stop if the instruction to do it is different than it was before. Word choice is paramount because that is the determinant of meaning that aspies lie almost entirely upon, and they may be searching for a change in meaning with *any* change in wording

Literal Standard of Honesty: An aspie may frequently accuse others of lying. Exaggeration, teasing, impressionistic speech, saying one thing and then saying something different in order to 'box in' a meaning from both sides---these may be experienced as 'lies' by the aspie. Language of course is not just about conveying objective information, but also about producing feeling in the other. "Saying something one doesn't mean," or at least mean literally, has to do with conveying frustration, or urgency, etc.. to the listener. Aspies understand correction or revision of course, but in those cases people said exactly what they thought was correct at the time. To quickly and casually overturn what one has said recently is taken as evidence of original insincerity, but that is not usually the case. An exaggeration is a mix of true and untrue, which is incompatible with logic.

Literal View of Agreements: Some agreements are meant to be solemn promises but most agreements are temporary works in progress. For example a neuro-typical says "lets eat at the Mexican restaurant" and the aspie agrees. Then on the way, the neuro-typical sees a teriyaki restaurant he or she had forgot about and says "oh let's eat here". The aspie may get disturbed, believing an agreement has been cast aside. This is likely equally true if the aspie prefers teriyaki! **The allegiance is to the agreement, not the mutual enjoyment.** There is no understanding of a 'whim' A whim is sincere but not meant to be durable. A whim does not become a lie or betrayal by changing.

Social Faux Pas: The typical faux pas is saying something that's true, but 'should' remain unsaid. Aspies are never certain if something is real unless it is explicit. It is hard to stay quiet if there is something that has not been said, and hard to speak and leave something out.

Not Modifying Style for the Situation Again this arises from not understanding how context and relationship affect the impact of an interaction. An aspie may be quite argumentative or contentious about views they have had to defend, even when among well-wishers.

Over-Inclusion of Detail Information is in details, and since an aspie seeks connection through *mutual comprehension of information*, the greater the hope of connection, the more detail is provided. But to a neuro-typical, detail, especially non-human detail, is seen as pushing away connection. (with some non-aspie speakers, excess detail does have this intention) Moreover, because of a literal conception of honesty and an over-valuation of information, aspies may feel that they are lying if they leave *any* information out, even through lack of time, or forgetting, or lack of interest on the part of the listener.

Doesn't Recognize Hints: Hints consist of saying something uncontroversial, but the meaning is actually something controversial that might arise in the mind of the hearer based on feeling implications. For instance a person wanting to end a social evening might say to the guest, "I bet you have a busy day tomorrow!" The hinting implication works by causing the hearer to go from busy -> to doing lots of things -> to effort -> to needing energy -> to people needing sleep -> to thinking **the host** needs sleep. When Asperger's is involved however, the statement will tend to be taken literally, the answer may be "no, not at all, I have no plans for tomorrow." with the hint completely missed. Eventually the host will speak plainly, but because it seems hints have been ignored, the host will speak with rancor, which the aspie guest will experience as coming out of nowhere. Also hints are a dominance-sensitive, that is high-status people are not expected to heed hints but lower status people are. Aspies are often mistaken for arrogant when they don't heed hints.

Inability to Make Smalltalk Smalltalk is bonding behavior. It is about sharing feeling, not information. Information is deliberately kept low to avoid triggering defenses. Gossip contains somewhat more information but but on highly charged topics so that the effect on the hearer is still the purpose.

Not Getting Jokes: As is well known jokes cannot be understood intellectually. Most humor is based on the tension between the punchline being illogical and unexpected on one hand, but on the other hand, fitting and agreeable on an impressionistic basis. Laughing is release of tension. When an Asperger's person makes a joke, it sometimes is just an arbitrary contradiction, because this is what jokes seem to be.

Face-blindness (prosopagnosia) We recognize familiar faces by how they make us feel. That is, implicit processing is used. The more important a person is to us, the stronger the feeling and so the easier the recognition. That is why not being recognized is taken as an insult--it is seen as a judgment of non-importance. Someone relying on explicit processing, however, only recognizes faces through long familiarity or repetition. The problem usually arises with a new potential friend or person to whom the aspie has been specifically introduced. Because of the importance, recognition should be easy, but to the aspie, because of the newness, recognition is elusive.

Walking Away in the 'Middle' This can be two things: 1) being overwhelmed (and perhaps not recognizing it), 2) not recognizing social transitions, which are about attachment and not information.

Delayed Response Explicit processing is slower than both implicit processing or spontaneous expression. Self-doubt and secondary 'walking on eggshells' only adds to the delay. With delayed response, and no response (described below) synchrony is violated.

No Response When neuro-typicals have no informative response, they respond anyway, with a response that acknowledges the question, or perhaps an emotional response. Aspies if they have no informative answer, will give no answer, although usually they are working on an ultimate informative answer. If the situation is one in which only an emotional response is possible, the aspie is usually speechless. This does not mean that the aspie is completely devoid of emotion, but that he or she automatically rules out these emotional bits as ingredients of a response. Neuro-typicals may feel ignored, which if it was the case, would be deeply disrespectful.

Seems Not to Follow Through on Agreements Aspies usually prize efficiency. For instance a neuro-typical wife asks an aspie husband to take something out to the garage. The aspie readily agrees. He knows that three days later, he will go into the garage to get the lawnmower. He mentally schedules the task for the same time, and continues to work on the computer the rest of the day. Later that afternoon, the wife is outraged, thinking he did not follow through. To her, it was understood that she wanted it done that day, perhaps that was conveyed in her voice or manner. He of course intends to follow through, and the efficiency aspect is meant to facilitate maximum contributions, the opposite of shirking.

Prefers Non-Fiction and Avoids Fiction: Probably two prongs 1) Since aspies are trying to complete understanding of the world, fiction is seen as a waste of time since it is potentially (if not practically) limitless, a true open ended system. 2) Fiction is made up, that is, it is not true! A non-fiction book that is made up is considered unethical. Fiction has no restriction and so may not be reliable. Those who like fiction of course do so because the ability to alter reality is used to intensify the interpersonal drama and increase the emotional effect on the reader more strongly, which 'brings the truth home.' A possible exception is some science fiction which is an imaginative reshuffling of systems, or horror, which deals with existential, not interpersonal worries.

Turns Conversations into Monologues: Neuro-typical speakers tend to let topics wander, because when this happens, the two speakers find out about each other and 'feel each other out.' Aspies though try to make contact through information. They know that staying on a topic exhaustively makes for the best information exchange. The aspie will usually have a greater depth of factual knowledge about many topic (often by an order of magnitude). Also he or she is reluctant to enter topics about which they know little. Aspies are often willing to listen to lectures about interesting topics, and so see little problem in giving lectures. These can be rambling or technically excellent lectures, but are not based on the interests or effect on the other person.

Stilted or Overly Formal Manner: This is an attempted safe haven from violating social norms. The formal manner is deemed the most considerate or careful by the aspie. But to the neuro-typical it feels out of place and is received by others as either odd, cold or arrogant.

Starts a Discussion Out of Context: This has several possible causes, 1) The aspie does not like to restate what has been stated sometime in the past (because this calls into question the whole truth-defining nature of explicit statements.) But this fails to set the context for the other person, 2) A naive belief that others are thinking about what one is thinking, or 3) the aspie has been processing something for a long-time and is answering where he or she left off.

Doesn't Apologize Readily: Aspies understand the confessional function of apologies but not the empathic one. That is, one can apologize because one has done something wrong and hurt another, but one can also apologize when one has done nothing wrong, or intended no harm, but someone else is nonetheless hurt. In practice of course the distinction is blurred with great benefit-- that is, people apologize *in case* they have done wrong. This makes unnecessary a dispute over whether someone has done wrong. Relying only on the confessional aspect, aspies only apologize when they are *certain* they have done wrong, which is a rare event for anybody, human nature being what it is.

Not a Team Player: The allegiance is to the truth, not the group. This can have great advantages in ethics and justice but it defeats bonding and closeness.

Doesn't Give and Doesn't Acknowledge Compliments. A true compliment is an expression of pleasure, not information. To compliment someone or something is to indicate it has been a source of pleasure. Without this understanding, compliments seems manipulative (as indeed they sometimes are) and aspies abhor manipulation.

Exaggerated Vigilance About Being Manipulated: Manipulation is getting someone to do what they do not want to do, by using their beliefs against them. Aspies always want to act consistent to beliefs regardless of desire. Whereas a neuro-typical, finding him- or herself doing something they do not want to do might just quit, an aspie will have a difficult time *not* carrying on even when realizing they are being misused! Hence the automatic wariness about the requests of others.

Doesn't Heed Unexplained Warnings or Recommendations: An aspie definitely wants to learn from the experience of others, but can only do so through the information developed. Especially when it comes to warnings, neuro-typicals tend to remember what not to do, but drop the reasons, or don't even ask, because to the neuro-typical they are especially unneeded. For recommendations of what to do, neuro-typicals may do a little better but often still drop the reasons. **But the aspie needs reasons to act.** The communicated fear or anticipation of others are not strong motivating forces. Aspies sometimes will promptly do what they have been told not to do, not in defiance, but to understand the reason. This, and the predictable 're-inventing the wheel' that has to happen, seems bizarrely unsocial or untrusting.

Doesn't Recognize His- or Herself Boring Others: Quite simply, aspies are never bored!. If information is not available in the immediate environment, it can be brought up in memory. Neuro-typicals only find certain information interesting. Motor restlessness in the listener is not recognized as a clue to boredom (or other distress) because aspies often have the same motor restlessness for other reasons.

Gets 'Captured' by Problems: Anything broken can be thought of as a system with something out of place. With Asperger's, putting systems right is a joy when it happens, and a huge distraction when it doesn't. Hours may be spent fixing something that only provides a minute's convenience. Others may just want to get on with life. But if one feels life is about putting things in order, how can one proceed when something is 'out of order?'

Doesn't Ask for Help Usually it doesn't occur to an aspie to ask for help. This can result in some ingenious inventions or workarounds where neuro-typicals would just use assistance from others. However, getting help from others, if not over-done, is bonding and develops liking. Cooperating in an activity is something many neuro-typicals find enjoyable. Aspies usually don't, and also often abhor the inefficiency. Neuro-typicals looking on, feel untrusted or judged incompetent.

Difficulty Distinguishing Intentional from Unintentional Acts. It is difficult to feel the intention of another who say bumps into them. In early life, aspies tend to over-assume unintentional, but later in life, after experiencing disappointment and bullying (discussed below) there is more tendency to over-assume intentional and malicious intent.

Fixated on the Negative Because of the focus on decreasing pain, everything tends to get seen in a 'problem' focus, and there is little framework for acknowledging or celebrating successes. However, pointing out only the negative in others efforts is experienced by the neuro-typical as ill-will.

Doesn't Acknowledge the Validity of Other Viewpoints. Neuro-typicals invest a sense of themselves into their sincere opinions. People are emotionally connected to their ideas. A gracious way to disagree is to acknowledge the other opinion as legitimate and interesting, even if one doesn't quite agree. This is an area where tact is in order. Aspies tend to treat a different viewpoint only informationally, refuting it without dilution. To a neuro-typical, this feels like they themselves, not just their position, are being attacked as wrong. Aspies believe it is dishonest to 'hide' disagreement, but since agreement is never 100 percent, letting many differences go unremarked is both practical and good manners.

Difficulty Merging Interests with Others: Generally it is understood that we all have different interests. To connect, people often try to find common interests, which may include some adaptation to make a fit. But aspies tend to not try to adapt to the interests of others but stick their own interests. The interests of others simply are not motivating factors for the aspie. This has the important implication that aspies prefer parallel play, that is, two people doing their own thing next to each other. Most neuro-typical adults are bored with this and think the aspie wants to be left alone, but this is often not the case. Aspies are known for 'solo' play partly because it is difficult to find 'parallel play' partners.

Laughing or Smiling Inappropriate to Context It seems that the face has some low-level neurological organization which causes it to smile or laugh when incongruity is experienced. *That is, when two things that don't go together are put together, a smile or laugh is a reflex.* This becomes a building block of mirth or humor. In neuro-typicals, there are so many other layers of emotional connection with the face, that the pure reflex is not ever showing. For the aspie the involuntary reflex engages with discomfort, such as not knowing what to do, or

being criticized unfairly. The aspie face in this case is not expressing derision or disdain, but discomfort and emotional confusion which is situation appropriate. This is one of the most tragic misunderstandings, many aspies have been fired or made pariahs for a single instance of this.

Strange Faces or Facial Expression This comes from stiffness in the facial muscles and disconnection of the face from emotional centers. Strange faces are usually spontaneous maneuvers to stretch facial muscles. See the discussion of stimming under the hypersensitivity section.

Fails to Recognize and Acknowledge Tact or Kindness in Others This applies when another person is confronting or complaining to the aspie. If this is done with tact, graciousness, or restraint, it implies goodwill and an intention to work together. If the restraint or moderation is missed however, the intent is experienced as hostile and so great defensiveness and hostility may arise in the aspie. The gracious person will feel insulted, but the aspie will feel that the other person 'started it.' An opportunity to resolve the issue and strengthen the relationship is lost.

Clothing Poorly Coordinated. Aspies tend not to consider the effect of their appearance on others, and clothing is often chosen for very different reasons than how it looks: frugality, low-cost or free, associations with prior good events, etc...'Mismatched' combinations are common, because each piece is chosen more for itself than any overall look. Often very worn-out items are still treasured, kept and worn frequently because of sensory defensiveness.

Seems to Value Inanimate Objects More than People For instance after re-modeling a room, an aspie might resent the marks or wear and tear that others leave once they commence living in the room. Aspies often look to inanimate objects or abstract concepts to bring about security because both categories, unlike humans, are predictable, reliable, and reliably shape-able. If the tendency is for the abstract, the aspie may seem dreamy. If the tendency is for the inanimate, **the aspie may seem 'obsessive-compulsive,' and conflict with others is heightened quite a bit.** It is not about greed or hating. The comfort of others is not seen as a plentiful counterbalance to the mess of others because the aspie usually does not value his or her physical comfort.

General Distrust This is a secondary effect of having been hurt early in life, during a 'naive phase' Aspies are incapable of insincerity and so have trouble recognizing it in others. Aspies have the strength of seeing through razzle-dazzle and perceiving problems about which neuro-typicals are temporarily blinded. Aspies however, may have trouble sizing up character *quickly*. (This never a foolproof process but it is how most people make friends.) After a certain amount of experience, the default position is taken that others are unreliable, insincere, and badly-intentioned, and of course selective attention is able to pull out small details that seem to confirm this.

Comes Off as Arrogant Arrogance is dismissing the contributions or point of view of others. Aspies tend to promote their own point of view without considering the contributions and point of view of others, not because they dismiss them but because they is not in their mind at all. This is an important distinction. Arrogant people tend not to listen to others for any reason, while aspies will listen to original ideas. Often aspies have, at least as far as the details, thought things further and so rush to counter counter-argument, but this is not arrogance but an attempt to be efficient. This of course is still a huge problem as far as teamwork goes.

Will Correct Small Errors Even if Disruptive An inaccuracy is something 'out of place' and very annoying to the aspie, even if the general gist is understood. On the other hand, the annoyance to the speaker of being continually interrupted is great.

Problem Focus The aspie tendency is to focus on what is wrong and be indifferent to what is right. There is very little information in things that are right. Most information and interestingness is in defining problems. This is why high level thinking is called critical thinking. Most people are prone to this, but aspies always go where the information is, which is the problem areas of any plan. Since aspies are rarely the initiators or bosses, it can seem that they are 'sniping from the rear' out of ill-will. They frequently do not understand that leaders want support for even imperfect plans (which of course is all plans). Aspies often have disdain for the type of subordinate that supports the leader uncritically. What is needed is a balanced approach.

Literal Interpretation of Language: Symbolic meaning, as discussed in the first section, are based on body feeling. True, common metaphors are like codes, but literal thinking can be a habit (but also literal thinking tends to be disciplined and avoids sophistry.)

Difficulty Mingling: In a get-to-know-you setting, the aspie is either passive or disruptive. It is hard to attune his or her mood to the moods of others, and difficult to adapt interests.

Won't Take Polite Direction. For instance a boss or teacher might say, "I wouldn't mind if you....", or "You might...." or "If it's okay with you...." as a way of telling the aspie what they want him or her to do. They are not actually questions but directions. The very indirect phrasing is there to diffuse the automatic small resentment that is natural when humans are told to do something. Of course there is room for solemn objections if there is a good reason not to fulfill the request, but ignoring the direction is considered insubordinate. Aspies often consider doing nothing in this situation as an honest, economical answer to a real question. See also the paragraph on hints elsewhere in this section.

Violates Over-Arching Tone. For instance during a school tour of a hospital it is appropriate to marvel over an item of technology, but if one is accompanying an in-law to the hospital where a potentially dire diagnosis is possible, it is considered rude. Logically, marveling in the latter situation would not harm anyone further, except it doesn't feel right.

Jumps to the Bottom Line When a request is being made, it seems efficient to immediately point out what one will not do, and so jumping to the bottom line is a preferred aspie procedure. To a neuro-typical this is often experienced as being rejected personally because it is energetically a "no" before the request is finished. In a situation like this wise people might hear the request out, and then say "this is what I can do....." and what they can't or won't do usually need not be made explicit. An implicit "no" conveys the same information but is less provocative than an explicit "no."

Spells Out All the Details and Implications that Others Have Already Inferred. Even if the listener indicates he or she 'gets it' this may be very compelling for the aspie. It causes more than boredom. Neuro-typicals expect to be expected to discern the straight-forward or even nuanced implications of main statements. That is why explaining a joke that others have already gotten is so annoying. An aspie though may try to connect by sharing his or her thought process, or he or she may feel comforted by completing 'the system.' Also conversations are enriched when the listener infers something the speaker hadn't thought about, and this procedure tramples that.

Hates Expediency: Expediency is the quality of an action, in which a rule or principle is temporarily suspended (but not modified for the future) in order to get to a acceptable result quickly. If two people have a disagreement, and one sees that the other feels much more strongly about it, or is more powerful, that person may yield without changing his or her mind at all, because the discomfort of a struggle is not worth the potential benefit. This is

expediency. To an aspie, expediency is wrong because comfort and ease can't be weighed against what is right. Sometimes, an aspie will not be happy with getting his or her way if they believe the other person yielded out of expediency! He or she may insist on arguing the point until the other person comes to agree. Neuro-typicals often view the aspie as bizarrely argumentative.

Doesn't Understand Appreciation When neuro-typicals have done something helpful for the aspie, he or she tends to treat it as though the helpful person was 'just doing their job' or 'just doing what they wanted anyway', so no acknowledgment or expression of appreciation is forthcoming. Appreciation may be a spontaneous blurring out of gratitude, but often it is expressed because the receiver feels the need to say something, not in payment for the help, but to acknowledge the agency and humanity of the helper. *Without it, the helper feels objectified and used.* That is why appreciation is even appropriate for boss-subordinate relationships. Unfortunately, from the outside, this transaction looks identical to narcissism, but it is very different. The aspie is simply treating others the way he or she treats him- or herself. It is tempting to say, "the way the aspie *wants* to be treated" which is the case with many of the traits in this section. I believe that aspies do want appreciation because it is so basic a human need, and that the hunger to earn appreciation underlies some of drivenness that accentuates conflict..

The Basic Bad Loop

Aspies are not good at recognizing mild or medium discomfort in themselves or others, but either despite this or because of this, discomfort often comes to dominate interactions. The sequence tends to be, 1) a neuro-typical becomes uncomfortable with what an aspie is doing, 2) the aspie because of this becomes less comfortable him- or herself but without recognizing it, and 3) the aspie responds by trying harder to bring across what they have been attempting. The problem is easy to foresee; these redoubled efforts distress the neuro-typical further, which increases the discomfort of the aspie, which increase his or effort etc... For instance an aspie that is boring someone with a lecturing manner will broaden the scope of the topic and extend the discourse, and an aspie that is putting someone off by an authoritative manner will respond to the listener's discomfort with more dogmatism, an aspie that is confusing a listener with an esoteric line of argument will employ even more arcane references, an aspie that has committed a faux pas will start to beat the sensitive topic to death etc... This has to end some way, and usually exasperation and unkind words are involved.

In cybernetics (or systems theory) the escalations described above are known as a positive feedback loops, which are inherently unstable. Social attunement of course happens by negative feedback loops, wherein what is not working is dropped or altered, just as a thermostat turns a furnace off when the 'right' temperature is reached. (For abundant clarity, in the points being made here, a negative feedback loop is desirable, and a positive feedback loop is undesirable.) **For a negative feedback loop to function, there has to be an indicator of 'enough.'** *Too little* and *too much* both lead to the aforementioned positive feedback loops. **But 'enough' is a felt thing.** Without feeling when it has been enough, an aspie may tend to go on to give too much response. Even giving what is wanted will be ruined by giving too much of it. Alternately, an aspie, having received disfavor for providing more than what was wanted, may swear off the activity completely. But too little response can also be provocative. Aspies may at times be better served by thinking in terms of '*how much*' people want, and not just '*what*' people want. That is because focusing just on '*what*' without focusing '*how much*', at least in social affairs, will tend toward irritating extremes.

To compound this, for the aspie, there is sometimes a strong loyalty to what 'should' work, and a difficulty accepting that something isn't working.

The Leaking Loop

This one develops over time. Leaking is a slang term from counseling. It refers to how repressed or dissociated emotion affects a person's interactions and expressions in a way that others perceive but to which the 'leaker' is oblivious. Everyone leaks at least a little. Leaking never completes an emotion or solves a problem. In fact, leaking protects an emotion from coming into awareness and being integrated or understood. Leakage is always very antagonistic and provocative to others. A common example is a person being asked "Why are you angry?" and him or her replying, "What do you mean angry? I'm not angry, stop trying to make me out as something I'm not!" The basis of conflict is easy to see.

With Asperger's, the sequence seems to be 1) be misunderstood for 'innocent' traits described above, 2) receive hostile, defensive, and bullying reactions from others, 3) become upset and angry, but not know it, 4) leak resentment and anger, 5) be told by others that one is causing a problem or being 'bad,' 6) an additional conscious layer of being a victim forms, 7) neuro-typicals dismiss the assertions of victimization, insist the aspie see his or own part in the situation, 8) pariah-hood. By adulthood, most aspies have internalized the first seven steps and manage uncannily to start new relationships at stage 7 or 8. This loop happens in marriages too.

Absence of a 'Stopping Rule'

Adult aspies seem to run afoul of social expectations more than anything else, by not stopping in time, whatever the behavior. This is partly because they do not recognize the importance of stopping when others 'get it', or when others don't get and aren't likely to or don't want to. At bottom it is difficulty feeling 'enough'. Going on and on is not ill-will—just the opposite, it is driven by goodwill to give others absolutely the best and most. In mathematics and engineering, some problems need stopping rules to avoid endless iterations. Human interactions cannot have such a rule, but well-timed stopping is essential for smooth relations.

Bullying

It is well documented that aspies are frequently bullied, not just as children but as adults. It is well to describe two tiers of bullying which I would like to term 1) sociometric, and 2) selective enforcement.

Sociometric bullying derives from first, the tendency of children to exclude others who are felt not to fit, and second the process by which the strongest or most aggressive of the excluded children tease and act cruel to the less aggressive excluded children, perhaps to act out a denial of their own exclusion, or to vent anger on an 'acceptable target'. The included or "in" group usually overlooks bullying. Adults bully sociometrically as well, but the "in" group is more complex in adulthood, with many intellectual, or sensitive people making their way back into inclusion by finding a niche in work and a compatible social group. Aspies do not usually find their way back into inclusion, and are the targets of outright thuggery often.

Selective enforcement consists of using the letter of the law or technical violations, to demote, fire, not hire, exclude, ignore, deny, discipline, or punish an aspie, not really for the stated reason but because of how he or she 'comes off' to others. Selective enforcement is very difficult to confront. If one disputes it, the accusation is often made that the disputer "can't take responsibility" for what he or she has done. If one shrugs it off, a record is created that thenceforward justifies the discrimination. Everyone commits small violations of small rules constantly. Selective enforcement is not about the 'crime' but about the popularity of the target. Yes people do have a right to address what makes them uncomfortable, but the problem should be named for what it is. Selective enforcement crosses a qualitative line from 'unpopular' to 'actually harmed.' It should be noted that with sociometric bullying, the 'dirty work' is done by a part of the outgroup, but that with selective enforcement, bullying is done directly by the in-group or even the leaders, and so is particularly marginalizing.

There are two other types of painful occurrences aspies experience that are perhaps not properly called bullying but which lead to bitterness: being uninvited, and being passed over for something. It is true that we all should be able to spend our own time with who we want, and also that we should be able to place into positions and tasks only people we believe can succeed whatever the reason. But this is best done by acknowledging the person and his or her expectations, and a truthful explanation of the reason.

Bullying proper always includes a power imbalance, intent to harm and an *already* distressed target. Aspies are often socially naive, trusting, and eager to be considered part of a group, so they are able to be 'set up' by bullies. For aspies, a problem is not understanding how their response is viewed by others. The bully tends to disguise or keep quiet the provocation, but the aspie, when he or she finally does respond, it is noisy or conspicuous. Aspies may not think of expressing their distress or anger (protesting), but rather may logically plan to incapacitate the bully. This may result in a response done "in cold blood" which strikes others as psychopathology, but which is really just derived from a problem-solving framework. Therefore the aspie gets into trouble even when the provocation is verified, because disruption and premeditation are weighted very heavily as faults in our culture. Revenge is frowned on strongly, but revenge as commonly understood may not be the motive.

Also bullying often comes from authority figures whose role it should be to stop bullying. Aspie responses are often mis-perceived as non-conformist and rebellious rather than the signs of distress and efforts at coping that they are. Teachers, principles, bosses, human resource professionals, and security personnel may become incredibly harsh as they investigate incidents because they take aspie points of view as 'unwillingness' to work with the group.

Social Assets Accompanying Asperger's Syndrome

Genius at Systematizing. Our present material standard of living is based on seeing and harnessing systems. Most aspies are capable of producing 'great 'value-added in their work-function, problems with 'office politics' aside.

Moral Sharpness: Accepting gray areas and being loyal to friends over time can lead one into murk and turbidity. Aspies moral understanding is not confused by attachment.

Objectivity While the objectivity may not make it self-appraisal (a difficult area for anyone) there is very little projection, and so observation of others is not contaminated by self-interest.

Great Naturalistic Observation: There is always a strong tendency to try to figure out how things work. Mere 'agreeableness' does not monopolize the attention

Excellent Factual Memory: Recall is prompted by the drive to make sense of the present situation, external or internal. It is well-understood that in most recall facts are altered to fit present mood and emotion (internal state) and cognitive schema. In Asperger's cognitive schemas may have a role in distortion, but there is much less interference from emotion. Also, during the storing of memory, facts, being part of systems, are given more importance.

Staying the Course: Generally, something proving difficult to accomplish doesn't discourage the aspie if the goal is deemed correct or useful.

Less Vulnerable to Peer Pressure Aspies are immune to group think, and are often the ones who point out that the emperor has no cloths.

How Can an 'Owner' of Asperger Traits (and Those Who Love and Respect Them) Address the Situation?

Understanding can lead to betterment through four avenues: 1) vindication, 2) adaptation, 3) accommodation, and 4) remediation.

Vindication is the relief and respect that arises when people on both sides of the issue understand that the traits are either biological states or represent adaptation to those states—they are not misbehavior!

Adaptation consists of aspies learning to perform to neuro-typical expectations, through study, planning, practice, and suppression. This of course has rewards. It is what all aspies are constantly attempting anyway, the meager results of this approach are largely the emphasis of this article. Adaptation also is self-negation.

Accommodation consists of neuro-typicals and Aspies both managing the environment and expectations so that aspies succeed just the way they are. This is noble and drastically underemployed as a strategy. It doesn't however, address the point that human connection and pleasure are in some ways limited by Asperger physiology, and accommodation cannot provide these goods. (Of course there are numerous other human conditions that put a ceiling on connection and pleasure).

Remediation involves durably changing the nervous system and the body. Complex final social behaviors will largely take care of themselves if this is done. Remediation is a concept where the vague chant of 'genetics' does quite a disservice. Plasticity in this area has been demonstrated, but it is not easy, short, or available through mere dabbling.

Social Training and Teaching Social Thinking

'Social training' is what has been usually recommended. It is an attempt at better adaptation. This has a real role with children where just a basic command of social expectations can decrease ostracism and bullying. Social training is information about what is expected and what to do in social situations. The best social training programs also coax participants to come up with their own *social thinking*. To the extent this works and makes things easier, of course it is a good idea.

Keep in mind that Asperger's is not a cognitive problem however. A *theory of mind*, as mentioned in an earlier section, though it makes a convenient rubric for theoreticians, makes a very elusive target for actual mastery of social situations. Social thinking *describes* social behavior but social thinking is not what *drives* social behavior. Social thinking is an artifact of deconstructing something gone wrong. This article is composed mostly of social thinking, and it is my hope that this is helpful. The reader is also directed to the very excellent work of Michelle Garcia Winner.

Social behavior is mostly (and at its best) driven by feeling. Social expectations arise because a person *feels* a need to see or hear or get something, and fulfillment of social expectations naturally occurs because someone *feels* the need to say or do something.

Trying to anticipate the expectations of others where implicit processing is diminished usually just consists of developing 'if-then' rules. The description is often used of learning unstated or unwritten social rules. These rules are unstated however, largely because they are unstate-able. In fact they aren't rules at all but 'typical' (but not certain) responses that are neuro-biologically (emotionally) based.

I realize there is an irony in the above position, in that the previous sections of this article discuss social expectations a great deal. However, this approach is not meant to be similar to teaching the grammar of a foreign language, but more like a seminar in cultural anthropology. It is like trying to apprise two different cultures of each others customs. This has a use I believe in preventing the worse misunderstandings. Intolerance arises largely from mis-attribution of aspie traits to volitional ill-will. As this discussion has been meant to emphasize, nothing could be further from the truth!

Overwhelmingly, adult aspies have been trying to learn 'the social system' themselves, their whole lives, with limited success. Often these learnings involve avoidance or work-arounds of high risk situations. Avoiding pitfalls reduces pain but doesn't really bring pleasure. The problem is that so much of the meaning of even non-verbal communication is context-related—interpretation really pivots on feel. Hence the suggestions below.

Sensory Integration

This is an approach of great value where sensory defensiveness is an element. Random sensory exposure in typical situations keeps the defensive state chronic and defeats discrimination. Sensory integration has been nurtured by the occupational therapy profession. At the risk of over-simplification, it involves mindfully modulating the sensory environment so that the participant, can with security, experience what is usually a narrow band of sensory arousal between passivity and overwhelm. A good general treatment of the subject is Sharon Heller's book *too loud too bright too fast too tight*. This has many referrals and also touches on more neuro-muscular approaches as described below.

Retained Reflexes

The broader study of this area is called neuro-developmental delay and the leading experts on it are Sally Godard Blythe and Peter Blythe. They have formed an institute available at inpp.org. This area is complicated and unfortunately, not really suited to self-diagnosis and self-treatment.

Neuro-muscular Training and Expressive Bodywork

This is where I think the real potential gains lie, not just of reducing conflict but of enriching a life. If one can't feel and control one's body, how can one feel and control one's emotions? Emotions arise out of the state of the body—one can refer to the work of Antonio Damasio to confirm this. A body-based approach aims to increase sensation, feeling and emotion, not to placate the expectations of others but to enrich the life of the participant. Of course, this is a long process with an uncertain outcome, but *so is life*.

It is not possible to briefly describe this process in this article. First I refer the reader to *The Fabric of Autism* by Judith Bluestone. While this seems contradictory given the distinction between classic autism and Asperger's I have suggested earlier, it is in the area of sensory function that the two constructs overlap, and Ms Bluestone's insight and practical approach to this is one of a kind.

Second, for a somewhat broader context, I refer the reader to my website www.reichandlowentherapy.org, or the works of Alexander Lowen, MD. The brevity of this paragraph is no measure of the promise that this approach holds! Recapturing one's ability to feel deeply is necessary to develop an abiding understanding and interest in the feelings of others.

Tips for Neuro-Typicals

Say What You Want Directly and Plainly Don't hint, don't understate. Spell out expectations, even literally—written instructions are better than spoken. Indicate the time frame in which you want something done.

Allow and Accept Asynchrony in Communication. For instance, let an exchange play out in email, even if you both live in the same house. In this case any delay does not take over as the subject of discussion, as it tends to in attempts at synchronous (face-to-face) discussion. After all, people tolerate asynchrony in internet shopping or judicial proceedings, in the interest of getting a better product.

Make Social Occasions Fairly Short and Fix Upon a Duration Open-ended social situations tend to provoke shutdown in the aspie for self-protection. A time limited foray is a manageable task.

Smirking, Sniggering, Rolling Eyes, and 'Knowing Glances' to Other Neuro-typicals are Demeaning and Not Helpful. If you think something is inappropriate, in intensity or content, or that the point is being missed, simply say so.

Weave Concrete Tasks Into Socializing This will provide some interest and orientation for the aspie. It can be agreed ahead of time that the concrete task cannot dominate the experience, if that is a concern. On the other hand, think of an Amish barn raising.

Touch the Aspie the way *he or she* wants to be touched, which is usually firm pressure and not friction or light touch. In turn the aspie will come to understand touching you the way you want to be touched.

Don't Force Immediate Choices: Rather describe what is available, how it may be accessed, and allow the aspies to unobtrusively take what they will. For instance, instead of saying, “Do you want x, or y, or both?” say “X is available, and Y is available too, and this is where they are.” The former forces the aspie to speak definitively to as to his or her desire. This is often a stopper. The latter just provides options. With Asperger's, having options is well-understood, whereas desire is not. Buffet settings are ideal for this. By all means, avoid an open-ended “What would you like” which usually precipitates a crisis in the aspie who does not want to risk asking for something not available. Another example, is the question “If I make you a chicken sandwich, will you eat it?” which is a much easier question than, “Do you want a chicken sandwich?” This I hope provides an inkling of why aspies like to just do things for themselves, to prevent these pitfalls.

Wait Through What Seems Like Long Pauses or Gaps: There is usually a very high quality response at the end of it. If the response really needs to be immediate, ask someone else, or don't ask.

Directly ask the Aspie to Number a 'Satisfaction' or 'Upset' level. For instance, “1” could mean very satisfied with the way things are going, and “5” could mean extremely upset by the way things are going. This will help avoid 'incidents' out of the blue. By concentrating on arousal and intensity, it avoids the more subjective qualitative aspects of emotion.