## Why Asperger's people don't lie and hate corruption and unfair business cartels:

People with Asperger's are often meticulously honest. That's to say that they go out of their way to be honest about things, even when honesty really isn't the best policy.

It's not that people with Asperger's cannot lie but simply that many, <u>not all</u>, feel very uncomfortable about lying.

If you ask a neurotypical person if they love you, you'll generally get a "yes" response (if they're going to give you one), immediately - even if they don't actually "love you".

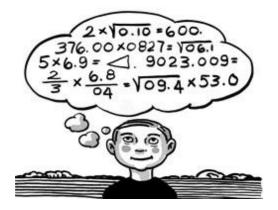
This is because a neurotypical person is fairly comfortable with the concept of love if they DO love you -- or they're comfortable with lying if they DON'T.

A neurotypical person will understand that a "yes" answer is their best chance of manipulating their partners into something, usually sex or money.

A person with Asperger's however won't usually lie to protect your feelings or to manipulate you. It's not that people with Asperger's are "Good people by definition", just that they usually lack non-verbal communication skills to manipulate anyone.

A person with Asperger's will tend to give a "no" or an indefinite answer if they're struggling with definitions (ie: if they really don't know) - or they'll give an honest answer even if it means that they lose certain privileges on offer.

Per Simon Baron-Cohen:



In moral terms, honesty is without doubt a virtue, and dishonesty is a vice. But in social terms, absolute honesty can lead to trouble, risking causing offense to others who may not want or need to hear the complete truth. White lies may be desirable. And in biological terms, dishonesty is a sign of typical brain development, whereas someone who is incapable of dishonesty may be neurologically atypical. Dishonesty is one defining characteristic of what it is to be human. It is not the only defining characteristic, but it does separate us from other animals. Some nonhuman species may have a limited capacity for deception, but humans have a flexible, unlimited capacity for deception. And since anything that is uniquely human is likely to be part of our genetic makeup, it stands to reason that we are, in a sense, built for dishonesty — and those incapable of dishonesty, like people with autism, have a uniquely human disability. Beyond having deficits in social interaction, they live with a different relationship to morality. Their experience is a unique window into the typical human mind.

We'll return to this point in just a moment. But before we can see what honesty means for being human, and what we can learn about it from autism, we need to take an unexpected detour and examine first what other species can and can't do when it comes to deception. To understand how humans lie, it profits us to begin by looking at monkeys. Consider, for example, the reports of how one monkey will wait until a second monkey (who is watching him) is not around before approaching a food source. Some interpret this as the first monkey trying to ensure that the observer does not discover the food source. Critics call this the "rich" interpretation. The "lean" interpretation is that the first monkey has simply learned that if he waits until no other animals are around before going to the food source, he will get more food. In this interpretation, there is no need to attribute to the first monkey any capacity to deceive. They are simply able to learn the rule that *eating alone = more food*.

Or consider the examples of animals who hunt in silence. Imagine the lioness who lies in wait in the long grass, silently watching a wildebeest who has not yet spotted her. The lioness waits for her moment, remaining as still and as invisible as possible, until she sees her split-second opportunity and lunges, as if out of nowhere, to successfully seize and kill her prey. Some interpret this as the lioness trying to ensure that the wildebeest does not discover she is there, so that he will believe he is safe and not run away. Again, critics call this the rich interpretation. The lean interpretation is that the lioness has learned that hunting in silence results in a kill, while making a noise results in the prey getting away. In this lean interpretation, there is no need to attribute to the lioness any capacity to deceive. She is simply able to learn the rule that *hunting in silence = more food*. An even leaner interpretation might be that silent stalking is in the lioness's genes – that it does not even require learning. The lioness just does this because she inherited genes that produce this behavior, much as a spider spins webs. Such genes have been passed on precisely because they lead to more food and therefore better chances of survival.

How do we decide if the rich or the lean interpretation is correct or better? Among scientists, good practice dictates that a lean interpretation, where possible, is preferable over a rich one, since lean interpretations are more parsimonious. In science, we want to explain events with the fewest number of factors; the aim is to avoid a proliferation of unnecessary factors. Explaining monkeys' or lionesses' behavior in terms of rule-learning is more parsimonious than explaining it by attributing to them the capacity for deception. This is because we already know they can learn rules. So why invoke an extra capacity when an existing one will do?

Leaving parsimony aside, one may wonder: If monkeys or lions or other animals could truly deceive, why do we only see possible instances of deception in very limited situations? If they can deceive, why don't they do it left, right, and center? Why only when hunting, or when locating food, or during sex? (Some monkeys mate in silence and out of sight, to avoid a fight with a rival male. Presumably the rule is *mate silently and out of sight = less conflict.*) According to this line of thought, the idea is that if nonhuman animals appear to deceive only in very limited situations, perhaps it isn't genuine deception at all. The philosopher Daniel Dennett gives the wonderful example of his dog going to the back door and scratching his paw on the door, as if to signal that he wants to go out. When his master gets out of his favorite armchair to let the dog out, the dog doubles back to sit in the now empty armchair. Did the dog deceive his master? Again, one can always give a leaner interpretation. The dog may simply have learned the rule *scratching at the door = get comfy seat*.

If what other animals are doing when they appear to be dishonest is not real deception, this begs the question of what counts as real deception. True deception assumes the deceiver knows that (1) other beings have minds, (2) different beings' minds can believe *different* things are true (when only one of these is actually true), and (3) you can make another mind believe that something false is actually true. Defined in this way, one can see that deception is no trivial achievement! The deceiver needs to have the mental equipment to juggle different representations of reality. No wonder that scholars of animal behavior are wary of elevating a single instance of behavior to genuine deception, and prefer to reduce it to simpler mental processes like learned associations.

When we look at human cases of dishonesty, could these not also be demoted to simple rule-learning? In the human case, it is actually more parsimonious to regard typical children's deception as true deception – the single easiest way of explaining the multifarious cases of children's deception is to admit that, yes, the child has a real capacity for deception. A

typical child of four years old (or older) does not only lie in relation to eating chocolate cookies but also in relation to pushing his sister, or sneaking a look at his birthday presents, or saying that he liked his present when he did not. One either has to say that each of these situations gives rise to a separate learned association or rule (e.g., to avoid punishment or get a reward) or to acknowledge that typical preschoolers have the capacity for deception.

So what is entailed when we say that the child's brain is capable of genuine deception? Rutgers psychologist Alan Leslie suggests that to deceive, the child must be able to represent two parallel but different versions of reality. The child knows that version 1 is the true description of an event, and that version 2 is false or fictional but is held to be true to some other person. Leslie calls this ability to keep two parallel versions of reality simultaneously in mind the capacity for meta-representation.

Meta-representation involves understanding how you can play with "truth conditions." Consider the sentence "John believes the moon is made of cheese." This can be true even if we know the moon is made of different stuff, so long as it the case that John believes his assertion. So, when Leslie suggests that at four years old typical children are capable of metarepresentation, what he means is that the typical four-year-old child can separate the truth conditions of the two versions of reality. One version of reality – "The moon is made of rocks" – is true if and only if the moon is really made of rocks. And four-year-old children understand this. The other version of reality – "John believes the moon is made of cheese" – is true if and only if John believes this, and four-year-old children understand this as well. And that is why the typical four-year-old child can deceive. He can represent "I ate the chocolate cookies" and at the same time represent "Mom believes I didn't eat the chocolate cookies." One can marvel at the psychological and neurological complexity of such a capacity, already in place in a typical four-year-old.

And then there are people with autism. Their neurological condition leads not only to difficulties socializing and chatting but also to difficulties recognizing when someone might be deceiving them or understanding how to deceive others. Many children with autism are perplexed by why someone would even want to deceive others, or why someone would think about fiction or pretense. They have no difficulty with facts (version 1 of reality) and can tell you easily if something is true or false ("Is the moon made of rocks? Yes! Is the moon made of cheese? No!"). But they may be puzzled by version 2 of reality, that "John believes the moon is made of cheese." Why would a person believe something that is untrue?

They have major difficulties grasping that another person might hold a false belief that *to that person* is true. A large body of experimental research shows that while the typical child achieves this understanding easily by four years old, children with autism are to varying degrees delayed in this area of development. As a result, they show some degree of "mindblindness." Even the higher-functioning children on the autistic spectrum, such as those with Asperger's syndrome, show delays in the development of mindreading ability. This neurological (and ultimately genetic) set of conditions can leave the person with autism or Asperger's syndrome prey to deception and exploitation.

Take the boy with Asperger's syndrome in the playground at school who was approached by a group of other boys, one of whom asked, "Can I have a look your wallet?" Innocently, the boy handed it over, and was shocked when the other boy ran off with it. This lack of "street smarts" boils down to not being aware that other people may say one thing but mean another. For the child with autism, there is only one version of reality. The other version (the world of beliefs and intentions) may be one he rarely glimpses, or grasps too slowly, too late. This tells us something very important: that the skills you need to survive and negotiate the social world involve mindreading and meta-representation – and that the capacity to deceive is a marker that a child is developing typical social skills.

When I was a young Ph.D. student, I tested children using the "pennyhiding game." This is the age-old game where you sit opposite the child and show him you have a penny. You then put your hands behind your back, conceal the penny in one of your hands, and then bring your two closed hands in front of your body to invite the child to guess which hand the penny is in. Obviously he has a 50/50 chance of choosing the correct hand. You then repeat this, varying which hand you hide the penny in. To trick the child, your best strategy is to be unpredictable, rather than always hiding it in the same hand. Most children find this game lots of fun. But to test whether he himself can deceive, you then swap roles. Now he is the hider and you are the seeker. The question is: how good is he at trying to trick you?

Playing this game with a typical child over four years old soon reveals that this is – literally – child's play. He realizes that in the role of hider he needs to do three things: (1) conceal the penny only when his hands are behind his back; (2) keep both hands tightly shut when inviting you to choose; and (3) over a series of trials, hide the penny in a sequence that is hard to predict. But playing this game with a child with classic autism – even if he is older than four – soon reveals major difficulties. The child with autism typically makes one of three kinds of error: transferring the penny from one hand to another in full view of you, in front of his body; keeping one hand open when inviting you to guess which hand the penny is in; or hiding the penny in an easy-to-predict pattern (such as in the same hand each time, or just alternating). The first two of these errors suggest he is not keeping track of what you might know, based on what you can see. He is just not keeping track of another person's beliefs.

As such, children with autism make very poor liars. Like the typical twoyear-old boy who says, "I didn't eat the chocolate cookies," but who has chocolate smeared all over his face and fingers, or like the two-year-old girl who plays hide-and-seek by standing in the middle of the room with her eyes shut and saying, "You can't see me!," the child with autism is very poor at telling lies. But whereas the two-year-old child is well on the way to developing a capacity for deception (spontaneously playing peekaboo because she is interested in what other people can see), the child with autism finds very little pleasure in playing such mind games.

Far more satisfying for a child with autism is a game rooted in version 1 of reality, the version he does understand, the world of physical objects. Lego bricks, which can be built into pleasing patterns and constructions, and

which can be assembled and disassembled in the same predictable way each time, or can be varied in a logical, systematic, rule-governed way, are far more attractive than a game of deception. Hence a neurological disability that leaves the child challenged in fast-changing social situations also leaves him or her more virtuous, more truthful, less deceitful. The person with autism or Asperger's syndrome may say that your haircut is awful, and this may be true. He means no offense in such a personal remark. He is simply saying what he thinks, and don't see the purpose of saying the opposite of what he thinks.

And even after twenty-five years in the field of autism, I am still shocked. A Ph.D. student with Asperger's syndrome said to me last week, "I've just discovered that people don't always say what they mean. So how do you know how to trust language?" Her "discovery" at the age of twenty-seven is one that the typical child makes at age four, in the teasing interactions of the playground.

Brain-scanning studies reveal that one key brain region typically involved in mind-reading is the left medial prefrontal cortex. This brain region is underactive in people with autism and Asperger's syndrome. Since these conditions to some extent run in families, genes will partly determine whether a person finds mind-reading easy or hard. I say "partly" because autism is not wholly genetic. Environmental experience is also important, but it appears to interact with genetic makeup. And if mind-reading is in part genetically programmed, it means it is the result of our evolution, since the processes shaping evolution (such as natural selection and sexual selection) act by enabling animals to survive to the age of reproduction, find a mate, and pass on their genes. It has been speculated that the first hominids who could mind-read would have had major advantages over those who could not – by deceiving and outwitting them, by being able to create shared plans and collaborate, by being able to teach each other, by being able to see other perspectives and negotiate to avoid conflict, or by being able to mind-read their offspring to anticipate their needs and thus provide better parenting.

So does this mean that people with autism or Asperger's syndrome are

somehow less evolved? Not at all. What appears to have happened in human evolution is that the brain has developed down more than one path. The "neurotypical" brain has been selected for its capacity to socialize and chat with ease, keeping track of the rapidly changing social world, different points of view, innuendo, hidden meanings, exchanges of glances, and exploitation. The autistic brain, on the other hand, has been selected for its capacity to focus on the physical world in greater depth than is typical, noticing small details that others miss (such as patterns in numbers or shapes) and attending to highly specific topics in order to understand them completely.

Pejoratively, clinicians describe the deep, narrow interests in autism as "obsessions," but a more positive description might be "areas of expertise." Sometimes the area of expertise a person with autism focuses on appears not to be very useful (e.g., geometric shapes, or the texture of different woods). Sometimes the area of expertise is slightly more useful, though of limited interest to others (e.g., train timetables, or flags of the world). But sometimes the area of expertise can make a real social contribution (such as fixing machines, or solving mathematical problems, or debugging computer software).

It is not that the neurotypical brain or the autistic brain is more evolved than the other: each has evolved differently, one to empathize and master the social climate, the other to systemize successfully so as to master the physical niche. The unique qualities of human intelligence are characterized not just by the capacity for mind-reading (and deception), which has enabled humans to work in coordinated activity unusually well, but also by the capacity to systemize, which has enabled humans to understand how things work, and to develop innovative technology par excellence. People with autism, who can perceive patterns better and concentrate better than their peers, are also more honest. Rather than regarding autism as a "disease," we should recognize it as a difference that deserves our respect. Some features of it, like a learning or language disability, may benefit from treatment. But other features, like remarkable attention to detail and utmost honesty, are valuable human qualities.

## What Can "Aspies" Accomplish? Take A Look At This List of Famous Aspies:

Adam Young, multi-instrumentalist, producer and the founder of the electronic project Owl City.

Adrian Lamo, American computer hacker

Carl Soderholm, speaker in neuropsychiatric disorders

Clay Marzo, American professional surfer

Craig Nicholls, frontman of the Australian garage rock band, The Vines

Dan Aykroyd, comedian and actor: Aykroyd stated he has Asperger's, but some feel he was joking.

Daniel Tammet, British autistic savant, believed to have Asperger Syndrome

Daryl Hannah, actress

Dawn Prince-Hughes, PhD, primate anthropologist, ethologist, and author of Songs for the Gorilla Nation

Gary Numan, British singer and songwriter

Heather Kuzmich, fashion model and reality show contestant on America's Next Top Model

James Durbin, finalist on the tenth season of American Idol

Jerry Newport, American author and mathematical savant, basis of the film Mozart and the Whale

John Elder Robison, author of Look Me in the Eye

Judy Singer, Australian disability rights activist

Liane Holliday Willey, author of Pretending to be Normal, Asperger Syndrome in the Family; Asperger syndrome advocate; education professor; and adult diagnosed with Asperger syndrome at age 35

Lizzy Clark, actress and campaigner

Luke Jackson, author

Michael Burry, US investment fund manager

Nicky Reilly, failed suicide bomber from Britain

Paddy Considine, actor

Peter Howson, Scottish painter

Phillipa "Pip" Brown (aka Ladyhawke), indie rock musician

Raymond Thompson, New Zealand scriptwriter and TV producer

Richard Borcherds, mathematician specializing in group theory and Lie algebras

Robert Durst, American real estate developer accused of murder

Robert Napper, British murderer

Satoshi Tajiri, creator and designer of Pokemon

Tim Ellis, Australian magician and author

Tim Page, Pulitzer Prize-winning critic and author

Travis Meeks, lead singer, guitarist and song writer for acoustic rock band Days of the New.

Vernon L. Smith, Nobel Laureate in Economics

William Cottrell, student who was sentenced to eight years in jail for fire-bombing SUV dealerships

Abraham Lincoln, 1809-1865, US Politician

Alan Turing, 1912-1954, English mathematician, computer scientist and cryptographer

Albert Einstein, 1879-1955, German/American theoretical physicist

Alexander Graham Bell, 1847-1922, Scottish/Canadian/American inventor of the telephone

Anton Bruckner, 1824-1896, Austrian composer

Bela Bartok, 1881-1945, Hungarian composer

Benjamin Franklin, 1706-1790, US polictician/writer

Bertrand Russell, 1872-1970, British logician

Bobby Fischer, 1943-2008, World Chess Champion

Carl Jung, 1875-1961, Swiss psychoanalyst

Charles Rennie Mackintosh, 1868-1928, Scottish architect and designer

Emily Dickinson, 1830-1886, US poet

Erik Satie, 1866-1925 - Composer

Franz Kafka, 1883-1924, Czech writer

Friedrich Nietzsche, 1844-1900, German philosopher

George Bernard Shaw, 1856-1950, Irish playwright, writer of Pygmalion, critic and Socialist

George Washington, 1732-1799, US Politician

Gustav Mahler, 1860-1911, Czech/Austrian composer

Marilyn Monroe, 1926-1962, US actress

H P Lovecraft, 1890-1937, US writer

Henry Cavendish, 1731-1810, English/French scientist, discovered the composition of air and water

Henry Ford, 1863-1947, US industrialist

Henry Thoreau, 1817-1862, US writer

Isaac Newton, 1642-1727, English mathematician and physicist

Jane Austen, 1775-1817, English novelist, author of Pride and Prejudice

Kaspar Hauser, c1812-1833, German foundling, portrayed in a film by Werner Herzog

Ludwig II, 1845-1886, King of Bavaria

Ludwig Wittgenstein, 1889-1951, Viennese/English logician and philosopher

Ludwig van Beethoven, 1770-1827, German/Viennese composer

Mark Twain, 1835-1910, US humorist

Michelangelo, 1475 1564 - Italian Renissance artist

Nikola Tesla, 1856-1943, Serbian/American scientist, engineer, inventor of electric motors

Oliver Heaviside, 1850-1925, English physicist

Richard Strauss, 1864-1949, German composer

Seth Engstrom, 1987-Present, Magician and World Champion

Thomas Edison, 1847-1931, US inventor

Thomas Jefferson, 1743-1826, US politician

Vincent Van Gogh, 1853-1890, Dutch painter

Virginia Woolf, 1882-1941, English Writer

Wasily Kandinsky, 1866-1944, Russian/French painter

Wolfgang Amadeus Mozart, 1756-1791, Austrian composer

Alfred Hitchcock, 1899-1980, English/American film director

Andy Kaufman, 1949-1984, US comedian, subject of the film Man on the Moon

Andy Warhol, 1928-1987, US artist.

Charles Schulz, 1922-2000, US cartoonist and creator of Peanuts and Charlie Brown

Glenn Gould, 1932-1982, Canadian pianist

Hans Asperger, 1906-1980, Austrian paediatric doctor after whom Asperger's Syndrom is named

Howard Hughes, 1905-1976, US billionaire

Isaac Asimov, 1920-1992, Russian/US writer on science and of science fiction, author of Bicentennial Man

Jim Henson, 1936-1990, creator of the Muppets, US puppeteer, writer, producer, director, composer

John Denver, 1943-1997, US musician

L S Lowry, 1887-1976, English painter of "matchstick men"

Al Gore, 1948-, former US Vice President and presidential candidate

Bill Gates, 1955-, Entrepreneur and philanthropist. A key player in the personal computer revolution.

Bob Dylan, 1941-, US singer-songwriter

Charles Dickinson, 1951, US Writer

Crispin Glover, 1964-, US actor

David Helfgott, 1947-, Australian pianist, subject of the film Shine

Garrison Keillor, 1942-, US writer, humorist and host of Prairie Home Companion

Genie, 1957-?, US "wild child" (see also L'Enfant Sauvage, Victor, )

James Taylor, 1948-, US singer/songwriter

Jamie Hyneman, 1956-, Co-host of Mythbusters

Jeff Greenfield, 1943-, US political analyst/speechwriter, a political wonk

John Motson, 1945-, English sports commentator

John Nash, 1928-, US mathematician (portrayed by Russell Crowe in A Beautiful Mind, USA 2001)

Joseph Erber, 1985-, young English composer/musician who has Asperger's Syndrome, subject of a BBC TV documentary

Kevin Mitnick, 1963-, US "hacker"

Michael Palin, 1943-, English comedian and presenter

Oliver Sacks, 1933-, UK/US neurologist, author of The Man Who Mistook His Wife for a Hat and Awakenings

Paul Kostabi 1962-, writer, comedian, artist, producer, technician

Pip Brown "Ladyhawke", 1979-, New Zealand Singer/Songwriter, Musician

Robin McLaurin Williams, (July 21, 1951 - August 11, 2014), US Actor

Seth Engstrom, 1987-, Magician and World Champion in Sleight of Hand. The best man with a deck of cards that the world has ever seen.

Tony Benn, 1925-, English Labour politician