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Unspooling the Thread

Connecting Five Remarkable Phenomena

Several exceptional human traits have, of late, become the focus of a great deal of curiosity. Two of them are now hot topics of scientific scrutiny after languishing for years as inscrutable oddities. Two others are nudging their way into scientific respectability while a fifth phenomenon has captured the public's imagination but, alas, not much else. The people exhibiting these traits seem, at first, to have little in common. But, as we'll see, they're connected by a significant thread—the personality characteristic of sensory and/or emotional hypersensitivity. We can follow this thread as it runs through these conditions, shedding light on how and why they manifest. We can also, I contend, "unspool" this thread to discern the gestation of individual human beings, perhaps even shedding light on the blueprint of life itself.

The five phenomena to be explored here are:

Synesthesia: overlapping senses, such as tasting a sound or hearing a color

Autism: a seeming lack of ability to empathize, which occurs on a spectrum from less pronounced to severe

Savantism: having an extraordinary mental ability that coexists with significant mental and social deficits

Prodigiousness: displaying a talent in an otherwise unfettered personality that is so advanced it's almost uncanny

Remembrance of Lives Past: instances in which young children relate apparent memories of someone else's life.

The fact that sensory and/or emotional hypersensitivity is a noteworthy feature of all of these suggests a common heritage in the brain and in the body. Consider that our genes and our environment intertwine, beginning in the womb, to shape who we'll become. If the convergence is smooth, I contend, a person will not ultimately demonstrate high sensitivity. If there are major bumps in the road, however—if the mother is affected by illness, by accident, by deprivation, by trauma—then the '"thread" noted here will appear. The infant or child will display a penchant for overreacting to sensory stimuli (or, alternatively, for closing himself or herself into a sensory induced reverie). He or she may also demonstrate a surpassing empathy and/or curiosity—the inclination to be moved by what there is to feel, and the drive to learn what there is to know.

High sensitivity is a pathway for identifying what happens to produce the five phenomena we'll take up here. It's also an illuminator, I believe, of the path we all take to becoming individuals.

Synesthesia

Let's start with synesthesia, a remarkable blending of senses that, in most people, are separate and distinct. While those of us born without the trait may say metaphorically, "This wine tastes wonderfully dry" or "I sure feel blue today," the synesthete actually experiences such perceptions. For her or him (more likely the former as synesthesia is much more common among women), a taste can be round or pointy, a word can taste like potatoes, the sound of a violin can be felt on the face, a letter or number or even a smell can have its own vivid and recurring color.

Hypersensitivity is an oft-noted aspect of synesthesia. One woman puts it this way: "Like many synesthetes, I have a heightened appreciation for all kinds of sensory phenomena…I tend to get overloaded quickly: like there's just too much sensory perception coming in at one time, and I have a hard time sorting it out and coping with it…Shopping can do it. Being in a store where there's a lot of noise, colors, smells—it's just too much.[1]

What causes synesthesia? Neuroscientists believe it results from extraordinarily dense connections in the brain—and, furthermore, that everyone has the capacity to be synesthetic. This latter view has evolved rather recently. The prevailing view used to be that each sense is processed separately in the cortex (the outer layer of the brain), with sensory information only coming together later. But this "uni-modal" model is now being questioned. It could be that cortical regions respond to and integrate information from several senses at once. Or, that our cortices are primed to process just one sense but information from other senses modulates or adjusts the signal from the primary sense.[2]

As an example, consider what happens when someone suffers a stroke and, while one sense becomes impaired, another type of sensory information comes to the fore. The case of Sherrilyn Roush, a synesthete studied at Rice University, is

particularly interesting. After a stroke, her skin became sensitive to sound. "My entire body rebels at certain pitches," she relates, adding that, even in her quiet apartment, she'll sometimes have to wear earplugs in order to concentrate. Since robust connections between brain regions have been found in people who are not synesthetic as well as those who are, our senses appear fundamentally more interconnected than scientists ever knew. Someone like Roush doesn't have to be born synesthetic—she can acquire it.[3]

Here we encounter the first of many intriguing correspondences between synesthesia, autism, savantism, and prodigiousness. Synesthesia has been found to occur in more than twice as many people with autism (18.9%) as in the general population (7.2%). And sensory hypersensitivity is common to both.[4] Scientists point to a proliferation of white matter tracts connecting different parts of the brain in both conditions. In autism, there is an increased volume of such connections between local regions, while in synesthesia the connections are more long-distance.[5]

Autism

The vast majority of people with autism (up to 90%) have sensory challenges themselves, including hypersensitivity.[6]

Consider a for-instance: Adam, a boy with an Autism Spectrum Disorder (ASD), is at the playground with his mother and a friend of his mother's. It's a typical scene: some adults playing basketball and racquetball, a group of moms pushing strollers, and younger children running around giggling and yelling. A Little League practice is going on, a breeze is blowing, and, just outside the playground, there's plenty of traffic.

In the midst of all this, Adam is in his own world. Suddenly he excitedly shrieks and points in the direction of the traffic. His mom's friend manages to catch the words "white police truck" being said again and again. The friend stops, listens carefully and hears a far-away siren. In the midst of the playground commotion, Adam has evidently tuned out all of it in order to concentrate on (and isolate) a sound that must initially have been many blocks away. His mother couldn't hear it, and her friend just barely could.[7]

This anecdote is instructive of what may be happening in cases of ASD, particularly instances where the child or adult in question has a more severe form of the condition. People who seem to be "tuned out" of social interaction may, counter-intuitively, have become that way not because they have a deficit of empathy or mental/social apparatus, but because they have fled from *too much* sensory or emotional input.

Known as the "intense world" theory, it's the brainchild of Henry Markram, director of the Brain Mind Center at the Swiss Federal Institute of Technology, his wife, researcher Kamila Markram, and their former associate, Tania Rinaldi Barkat. The theory emerged out of years of frustration with the Markrams' son, Kai (who is now 21). The concept they hit upon can be described this way:

> Consider what it might feel like to be a baby in a world of relentless and unpredictable sensation. An overwhelmed infant might, not surprisingly, attempt to escape...Unlike adults, however, babies can't flee. All they can do is cry and rock, and, later, try to avoid touch, eye contact, and other powerful experiences. Autistic children might revel in patterns and predictability just to make sense of the chaos.[8]

The intense world theory posits that the world autistic people perceive is one of constant sensory overload. This is because their brains are hyper-connected. Rather than one cell having connections to ten other cells, it might be linked to twenty. So the world is experienced as "a barrage of chaotic, indecipherable input." In order to cope, "you'd need to be excellent at detecting any pattern you could find in the frightful and oppressive noise…you'd have to control as much as possible, developing a rigid focus on detail, routine and repetition. Systems in which specific inputs produce predictable outputs would be far more attractive than human beings, with their mystifying and inconsistent demands and their haphazard behavior."[9]

No doubt this strategy succeeds in protecting the autistic child from an overload of stimuli. But it comes at a significant cost. There are critical stages in neural development when certain kinds of external input are essential for the growing brain. If the opportunities for interaction with the outside world are minimized during these periods, social and language impairments may arise. Thus, in seeking a measure of comfort and predictability in his environment, the infant who was initially prone to autism may well cement it by unwittingly sabotaging his social, linguistic and emotional skills.[10] Nature and nurture thus collude in the development of ASD.

A third element—immune function—plays an essential role in at least some cases of autism. Research has shown that immune system disorders are more common in the parents of children with ASD[11] and, furthermore, that certain antibodies associated with maternal stress and infection may cross the placenta during pregnancy, ultimately interfering with the fetal brain's organization.[12] While this process is believed to apply to just a quarter of all cases of ASD, the documentation behind it is convincing.[13] The implication: the "intense world" of the infant who develops ASD is, at least in some cases, less a matter of genetics and more of immune system influence and other factors (such as maternal stress) during pregnancy.

On a parallel track, it appears that certain immune system molecules, instead of scouting for germs, influence the connections between neurons. One of them, known as C1q, has the job of "pruning" weak and unnecessary synapses in the normal course of development. But if C1q and other such proteins are diverted from this task—say, because of a virus in a mother's body when pregnant—they might not act sufficiently in the fetal brain. Indeed, in animals it's been found that a deficit of such proteins is linked with extraneous neural connections.[14] And a surfeit of neural connections is implicated in both autism and synesthesia.

The prospect raised here is that a maternal infection during pregnancy—or, for that matter, the occurrence of stress, trauma, injury, deprivation, or exposure to environmental toxins—could cause the child's brain to be hyper-connected,

setting the stage for extraordinary sensitivity.[15] The nature, severity, and timing of the occurrence would presumably have much to do with the condition or personality trait ultimately manifested. Population studies indicate, for example, that ASD may result if a pregnant mom develops an infection during the second trimester. [16]

Savantism

"Savant syndrome" is the name for an extraordinary condition in which someone with serious mental impairment (often some form of ASD) displays a spectacular "island of genius" amidst his or her overall disability.[17]

Take, for example, Alonzo Clemons. Having had no training in art, he nonetheless sculpts intricate, true-to-life figures of animals in motion with merely a glance at an image on television or in a book.[18] Or consider another savant, blind from birth, who, at 14 years old, played Tchaikovsky's Piano Concerto #1 from beginning to end flawlessly, having heard it just once. Or the late Kim Peek (who inspired Dustin Hoffman's portrayal in the film *Rain Man*), who would read books extremely rapidly, one page with the right eye and the other with the left. He also memorized literally thousands of books, each from reading just once.[19] In all these cases, the savant "knows things they never learned" (the memorable phrase of savant syndrome expert Dr. Darold Treffert).[20]

Perhaps the most incredible manifestation of savant syndrome is that of the "acquired" savant. Here, prodigious skill, especially in art or music, emerges completely unexpected in people who have suffered a head injury, stroke, dementia, or other form of brain damage. Take the 56-year-old builder who, after surviving a stroke, "began filling several notebooks with poems and verse; he had never written poetry prior to that time. Following that, [he] began to paint expansively and expressively, spending almost all of his time painting and sculpting."[21] Or consider the 42-year-old orthopedic surgeon who, in the aftermath of being struck by lightning, developed an insatiable desire to listen to classical piano music, a complete departure from his longtime taste for rock. He sought out Chopin recordings and had such a strong desire to play them that he taught himself. Close on the heels of this impulse, he started hearing music in his own head, "an absolute torrent" that would intrude into whatever he was doing. Over several years, he wrote down transcriptions of what he was hearing, ultimately recording and performing his own "Lightning Sonata."[22]

What all savants have in common is prodigious, almost uncanny memory. This type of memory, while deep, is also narrow, linked solely to their particular ability. The best explanation of what happens in the brain of a savant is this: Damage occurs to the left side, with higher-level memory circuits also sustaining damage. Parts that are undamaged are recruited to compensate, as are lower-level memory capacities. Rewiring occurs, and dormant capacity from the newly wired area is released. Treffert terms this process "the 3 Rs": recruitment, rewiring, release. It's a matter of fast, pre-conscious mental activity, different from the executive level reasoning that most of us engage in. Indeed, savants' creativity and cognitive flexibility tend to be severely limited. In their place is automatic, rigid, rule-based processing.[23] If this surpassing attention to detail is reminiscent of autism, that's no coincidence: about 50% of savants have an ASD.[24]

Treffert believes that acquired savant syndrome indicates latent ability within everyone, that all of us have some "Rain Man" capacity within.[25] I will suggest the implications are even greater than that.

Prodigiousness and Giftedness

In *Nature's Gambit*, his illuminating extended study of six child prodigies, Tufts University researcher David Henry Feldman recounts several very strange anecdotes told to him by parents of these children. One of them, Adam (pseudonyms were used to maintain confidentiality), related what seemed to be memories of his own birth, including reaction to the bright lights of the delivery room and the placement of a suctioning bulb into his nose. He also related apparently prenatal memories, such as the sound of his mother's singing and "the walls closing in on me—they hurt." What makes this latter point so remarkable is that his mother's pregnancy was beset by numerous complications, including uterine contractions that threatened to terminate the pregnancy from the fourth month onward.[26]

Among prodigies, there is an over-representation of complicated pregnancies and premature births.[27] For instance, the mom of Jake Barnett (a renowned math and physics prodigy) was hospitalized multiple times before giving birth. In another notable case, a mother of an eventual prodigy had an accident while pregnant, but not just any accident—she fell as she was helping her husband fight off an intruder they surprised trying to break into their house.[28]

There is also an increased occurrence among mothers of prodigies-to-be of preeclampsia, a condition marked by a sudden rise in blood pressure and swelling of the face, hands, and feet. Preeclampsia generally occurs during the late second or third trimester; the cause could be an under-developed placenta. This, in turn, could owe to a genetic defect whereby the mother's immune system treats the placenta like an invader.[29] Interestingly, it's been found that exposure to environmental toxins increases the risk for both preeclampsia and premature birth.[30]

Just as preeclampsia is associated with more than its share of child prodigies, so it is also significantly linked to the development of autism.[31] The placenta itself could be a veritable "biomarker" for autism. Researchers have found that the more abnormal folds a mother's placenta has, the more likely her child will have autism and the more severe the condition. Such creases seem to be the placenta's way of responding to a variety of stressors—placental folds are akin to a check-engine light, a marker of something somewhere being wrong.[32]

Although seeming to retain memories of *in utero* experience is not something all prodigies share, virtually all of them have a finely-tuned sensitivity to feelings, their own and others'. On the one hand, their feelings are intense. One mother of a prodigy reflects that her son "just felt more from the time he

was born. He just had so much emotion and feeling inside of him."[33] Prodigies' sense of connection with other people and with life in general also disposes them to be "the most morally sensitive and generous individuals I've ever met," says Dr. Joanne Ruthsatz of Ohio State University, who's been studying child prodigies for the past 15 years.[34] They—and other highly gifted children, for that matter—have a deeply felt sense of justice. They can become terribly upset if a classmate is wronged, and take personally issues such as war, poverty, homelessness, global warming, and environmental degradation.[35]

These children, it's often been noted, tend to ask probing, existential questions, indicative of an intuitive understanding that they've come into a world much greater than themselves. They may also report transcendent or spiritual experiences. Elizabeth, for example, while sitting on a cliff overlooking the Pacific, felt her mind transported beyond the ocean, beyond the earth, and beheld what she described as "the total interconnectedness of the universe." And Ian spoke of feeling holes in the fabric of the universe with the extinction of every species.[36]

Just as half of savants are diagnosed with some form of autism, half of the prodigies in a recent study either had ASD or had a close family member who does.[37] My sense in all these cases is that both hypersensitivities and uncanny abilities may result when something goes awry with the developmental process. This is not to invalidate any of the mechanisms that have been implicated as we've homed on these phenomena. But I propose bringing something additional and extremely fundamental into the equation: emotion.

The Role of Fear

Fear is the most elemental emotion. A threat to self-preservation triggers a panoply of sympathetic nervous system activities: our senses go on "red alert," our pupils dilate, muscles are tensed, and respiration is increased. The body prepares to fight, flee, or freeze. (The latter is not as well known a response but is amply illustrated in the animal kingdom, e.g., "playing possum."[38])

The part of the brain instigating all this activity is the hypothalamus. In moments of anxiety or threat it prompts the adrenal glands to release the hormones adrenaline and noradrenaline. The hypothalamus also stimulates the pituitary gland to release a hormone called ACTH, which, carried to the adrenal glands, causes the release of still other hormones. One of these is cortisol, which serves to marshal bodily energy (and also has an effect on the immune system over time). This entire stress response system is known, in shorthand, as the hypothalamic-pituitary-adrenal (HPA) axis.

We'll see why the HPA axis is germane to sensitivity in just a bit. For now, let's consider how extreme fear registers not just in a given animal but can actually be transmitted to its offspring—and even to its offspring's offspring.

The study was conducted by a team at Emory University, and it's set off shock waves throughout the behavioral science community.[39] In the first phase, mice were trained to be afraid of acetophenone, a fruity smell that's used in cherry and almond flavorings. The researchers paired this fragrance with an electric shock to the mice's feet, so that the scent soon became a warning signal. Their noses adapted accordingly, generating more of a particular kind of neuron keyed to the smell, and so did their brains, which grew an expanded recognition area for it. So far, all of this is basic Pavlovian conditioning and neural adaptation.

But the offspring of these mice, who had never before been exposed to the smell, also showed increased fear and startle responses to it. Somehow the learned association was transmitted from one generation to the next. The brains of these offspring also had more of those same neurons, so their noses were more sensitive to the fruity smell. Amazingly, even the third generation of mice was similarly affected.

The researchers took care to verify that the results did not stem from the mouse pups learning anxiety by modeling it after an anxious parent. The mice showed no fear reaction to other scents or other types of warnings. To confirm this, the scientists took sperm from the first set of mice, implanted it in females from another lab, raised them in isolation, and still found an increased sensitivity to the original scent.

That such changes happen over the span of a single generation indicates that random DNA mutations are not involved, since such Darwinian adaptation takes place slowly, over many generations. Epigenetics, a relatively new concept in which environmental influences alter gene expression, seems to be at work.[40]

If the same findings hold for human beings, we're left with the amazing implication that fearful experiences can make a man's children, and even his children's children, more sensitive to the same stimuli that evoked fear in him. His progeny may also be more highly reactive in general. If this is the case for fathers, imagine what effect a pregnant *mother's* fearful experiences might have on the child she is carrying. After all, she and her child are "locked in the closest of biological embraces" via the placenta.[41]

To return to the HPA stress response, it's entirely possible that a pregnant mother's fearful reactions, especially if chronic, could effectively "program" her child to be anxious, high reacting or otherwise sensitive. I noted earlier the case of one eventual prodigy, whose pregnant mother fell as she was helping her husband fight off an intruder they surprised trying to break into their house.[42] Talk about a fearful experience! Kai, the son

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of autism researcher Henry Markram, displayed a veritable terror of trying new foods when he was young.[43] A researcher who worked with highly gifted children observed that several of them "were terrified of germs and would visualize them flowing through their bodies, destroying their health."[44] I suggest that these are not coincidences.

Just as most people can vividly remember where they were and what they were doing when the World Trade Center was attacked on September 11, 2001, I propose that fear—that most primal emotion—can "imprint" certain people with a virtual snapshot of what was taking place around them when something traumatic occurred. Their brains and their bodies may be especially sensitive to begin with[45] or, as suggested by the Emory study, their parents or grandparents may have had a particularly fearful experience.

Remembrance of Lives Past

Adam, the prodigy who seemed to remember his own birth, had other remarkable "memories." At 18 months old, he was getting a bath when he suddenly sat bolt upright in the tub, screaming "The men! They're coming!" His eyes appeared fixed on some distant object and he seemed unaware of who and where he was. When asked by his mother who "they" were, he replied with mounting hysteria that men in uniforms and guns were coming to get him. Later, at age two-and-a-half, Adam was playing in his mother's office with a puppet theater when he began screaming in apparent terror that he recognized that theater. After she took him out of her office and calmed him down, he related that the theater city was Göttingen where, as a French Jew, he had studied medicine "before the war." His stunned parents later went to the library, looked up the town of Göttingen, and found that it is located in Germany's Rhine Valley, that its university was established in the 18th century, and that its town square is distinguished by a statue not unlike the one depicted in the backdrop of the toy theater their son had been playing with.[46]

In another instance,[47] two-year-old James Leininger loved toy planes, but he began having repeated nightmares of a horrible plane crash. He would kick his legs up in the air, screaming "Airplane crash on fire, little man can't get out." Then during the day, he would slam his toy planes into the family's coffee table while yelling "airplane crash on fire," to the extent that there were dozens of scratches and dents in the table. James talked about the crash, relating that he had been a pilot and had flown off a boat. His father asked him the name of the boat and he said "Natoma." When his father remarked, "That sounds Japanese to me," James replied "No, it's American." James went on to relate that he had piloted a Corsair, that his nickname was Little Man, and that he had a friend on the boat named Jack Larson.

After years of painstaking research, James' father learned that an American aircraft carrier, the USS *Natoma Bay*, had supported operations at Iwo Jima during World War II—and that it had lost one pilot there, a Pennsylvanian named James Huston. His plane crashed almost exactly as described: hit in the engine, exploding, crashing into the water and quickly sinking. And the pilot in the plane next to his when this happened was named Jack Larson.

In such cases, young children will "recollect"—with obvious emotion—things that seem far beyond what they could be expected to have read about or encountered. Nor do such children appear to be abused or suffering from any trauma connected with their current life. As with savants (whether congenital or acquired), these children know things they've never learned.

The degree to which these children display heightened emotion in recounting these apparent memories is a tipoff, to me, that something truly significant is going on. A boy like Adam or James manifests terror akin to adults with PTSD—why should he? The answer, I submit, relates to the nature of extreme fear as well as the circumstances of a person's death.

Fear puts our entire being on red alert. The pupils dilate, muscles are tensed, and respiration is increased as the body prepares to fight, flee, or freeze. Meanwhile, the HPA axis springs into action by releasing a cascade of hormones that serve to marshal bodily energy. If we are indeed in mortal peril, our entire bodymind tenses like a spring ready to snap. Our senses are honed to a fine edge; we notice every detail that could affect our existence. But consider what would ensue if all that energy had no outlet—if, because of a sudden accident or foul play, someone could neither fight nor flee but were trapped in freeze mode? Could there be a mechanism, somewhere between life and death, where memories associated with the struggling person's circumstances are preserved? It would be akin to the echoes, preserved down the eons, of the Big Bang observable through faint but distinct background radiation. Except in the cases we are considering, the intensity of the person's feelings—his or her life energy, self-awareness and *being*—might somehow be captured in a fusion of space and time. This imprint might become available for another, nascent life form: not "his" or "her" memories (as in reincarnation) but a transmutation just the same.

According to Dr. Jim Tucker and the late Dr. Ian Stevenson, the preeminent researchers of apparent past life memories, in 70% of the more than 2,500 cases they've investigated, the person whose life is apparently being remembered died violently or unnaturally.[48] From a biological standpoint, I find this number impressive.

The Possible Foreground of Life

Challenges to normal development in the womb, I have argued, may be the surest precursor of the conditions we've looked at, whether synesthesia, autism, savantism, prodigiousness/giftedness, or the apparent recollection of lives past. If this is so, there are broader implications that I would like to speculate upon. Given that the individual can be influenced to such a large extent during gestation, might we "rewind" the process and imagine the possible origin of human life?

While the question is audacious, I do not think it is unreasonable to ask, especially given what science is rapidly learning about immune function, the development of the fetal brain, the neural integration of sensory information, etc. The challenge is to build on subject matter and processes now accepted

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as valid (some of which, like epigenetics, amounted to heresy only a few years ago) and bridge to subjects that science has not yet deigned to tackle. Many phenomena that formerly were dismissed as "anecdotal" and unworthy of serious investigation—such as chronic fatigue syndrome, fibromyalgia, and the placebo effect, not to mention synesthesia, autism, and savantism—are now subjects of robust inquiry. It would be shortsighted and sad if science were unwilling to apply its ever-expanding toolkit, without prejudice or presumption, to the puzzle of apparent past life memories, for example. The fact that a discernable "thread" of sensory and/or emotional hypersensitivity runs through the phenomena we've examined offers a starting point for effective inquiry.

Too often, science brands subjects that seem to go against its grain as "anomalous" and, by use of that moniker, reinforces a prejudice against open-minded investigation. Phenomena such as synesthesia, autism, and savantism, along with chronic fatigue syndrome, fibromyalgia, and the placebo effect, were all viewed as mere curiosities at one point, and the people so affected were categorized as outliers or freaks of nature. But anomalies disclose gaps in our understanding of nature. In the words of neuroscientist V.S. Ramachandran of the University of California-San Diego, anomalies "show the depth of our ignorance."[49] A well-known skeptic, psychologist James Alcock of York University, got it right when he said that "It is the study of anomalies that drives science forward….The strange and compelling experiences that people have reported across the ages provide an important and fascinating field of study.…We can only expand our knowledge of [human] functioning…by coming to understand the genesis of such experiences."[50]

To unspool the thread that runs through the intriguing phenomena we have been considering here is to gain a fuller understanding of how certain people can know things, do things, or perceive things that are so surpassingly extraordinary. To unspool that thread is also, I suggest, to potentially peel back a curtain on the human blueprint forming. In the cases we have looked at, the process of gestation has been affected by some quirk, either an illness, an accident, a deprivation, or a trauma visited upon the pregnant mother. That process, having been short-circuited, produces a child who is more closely connected with the universe, with the web of sensation and emotion, than he or she would otherwise be. An accident or act of God (e.g., car crash, stroke, lightning strike, etc.) that occurs to a normal adult can also rewire the brain so that a similar effect is achieved. All this suggests that our typical waking consciousness is highly circumscribed. Perhaps William Blake was right when he stated, "If the doors of perception were cleansed, everything would appear to man as it is—infinite."[51]

Gestation does not mean just the development of an embryo between conception and birth. It is also defined as the development of an idea or plan in the mind.[52] Suppose this idea or plan comes to fruition in the form of individual human beings and is "seeded" by a greater mind, or via the mystery and majesty of life itself? The Greeks called this seed your *daimon*; the Romans termed it your *genius*; the late Jungian psychologist James Hillman refreshed the concept as the "acorn."[53] Through whatever forces of nature, nurture, epigenetics, and soulfulness it springs, it is invariably *you*—your form, your pattern, your blueprint. Neurons and glial cells, nerves and organs, muscles and bones, head and heart, psyche and soma—these will coalesce around the unique design. The daimon, furthermore (according to classical sources), will have its way. It will impel the person toward his or her destiny.

Synesthetes, savants, those with an Autism Spectrum Disorder, the highly sensitive, the gifted, the prodigious, and those who, at an early age, volunteer with urgency the memories of an apparent past life—all of them, I suspect, have a degree of access to the universal foreground of life. They are in some sense "throwbacks" to capacities we all could have if our own prenatal development had been disadvantaged or interfered with in a major way. We should, therefore, pay proper attention to what they have to tell us. What we stand to learn could go well beyond the biological and the neurological, into the metaphysical and meaningful.

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