

One's Own Brain as Trickster – Part II: It's For Your Own Good

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The unknown can sometimes be frightening. Fear of the unknown can sometimes be even more frightening.

In 1997, I presented a paper at the SSA conference titled "One's Own Brain as Trickster" (Day 1998), in which I briefly explored ideas surrounding synesthesia and the human brain playing "tricks" upon oneself and one's perceptions. In that previous paper, I explored how Trickster might come in as one tries to define one's "self". This time around, I'm looking more at how Trickster might pop up in issues of how one's brain is physiologically put together, and/or how it might reconstruct itself over time, and the extent to which we operate upon the premises that our perceptions contain realities – or, taking it further, reflect *the* one-and-only "reality".

Synesthesia is the general name for two related sets (or "complexes") of cognitive states (see Baron-Cohen & Harrison 1997; Cytowic 1989, 1993; Grossenbacher & Lovelace 2001, and Day 2001). In the first set, "synesthesia proper", stimuli to one sense, such as smell, are involuntarily simultaneously perceived as if by one or more other, additional senses, such as sight and/or hearing. I myself, for example, have two types from this set of synesthesiae: The sounds of musical instruments will make me see certain colors, each color specific and consistent with the particular instrument playing. I also have colored taste sensations; for example, the taste of espresso coffee can make me see a pool of dark green oily fluid about four feet away from me.

With the second form of synesthesia, which I call "cognitive" or "category synesthesia", certain sets of things which our individual cultures teach us to put together and categorize in some specific way – like letters, numbers, or people's names – also get some kind of sensory addition, such as a smell, color or flavor. The most common forms of cognitive synesthesia involve such things as colored written letter characters (graphemes), numbers, time units, and musical notes or keys. For example, the synesthete might see, about a foot or two before her (the majority of synesthetes are female), different colors for different spoken vowel and consonant sounds, or perceive numbers and letters, whether conceptualized or before her in print, as colored. A friend of mine, Deborah, always perceives the letter "a" as pink,

"b" as blue, and "c" as green, no matter what color of ink they are printed with. Synesthesia has definite neurological components and is apparently partially heritable, one component perhaps passed down genetically on X-chromosomes.

Synesthesia is currently quite unknown amongst the general population of medical practitioners worldwide. It is recognized by the American Medical Association and the American Psychological Association, and an acknowledged American Synesthesia Association now exists. One of the current leading neuro-psychologists in the world, Vilayanur Ramachandran, does research on synesthesia as one of his main "hobby" interests (see Ramachandran & Hubbard 2001). Nevertheless, an adolescent of, say, thirteen years old, reporting aspects of synesthesia to her parents, teachers, and, eventually, family doctors and then various medical and psychiatric specialists, will probably be diagnosed as schizophrenic or just "crazy" in most places in the world today – including the United States and Canada – even though the AMA and APA both proclaim synesthesia to be totally benign.

Knowing this, many synesthetes thus keep their synesthesia a secret. This, in essence, basically means (perhaps especially in regard to the synesthesiae "proper") denying how they have perceived the world all of their lives (or at least since about age four or five, when synesthesia begins to firmly manifest itself), and pretending that one or more of their modes of perception work differently. Let's put this into a kind of perspective: imagine being sighted, with "normal" visual abilities and perceptions of sensations, and being forced and pressured by those people and situations around you to try to pass for blind. This has some similarities to such things as being homosexual and "keeping it in the closet". Many synesthetes use such a comparison themselves, and have even adopted such phrases as "closet synesthete" and "coming out to my family". However, at least as many also describe their situation as being akin to being an extra-terrestrial, non-human alien – or, perhaps, an animal such as a bat – trying to pass for "human". Frequently, there exists the fear of ridicule by "normals". Far worst, however, is the fear of being misdiagnosed and one way or another "trapped" by doctors and parents who wish to attempt a "cure".

One of my synesthete friends wrote to me the following:

In his book The Man Who Tasted Shapes [Cytowic 1993], Dr. Cytowic talks about the tendency of the medical community (in the U.S., at least) to reject patients' claims related to synesthesia. I read it about 5 years ago, but as I recall it, the training that medical students receive (esp. since the 1940s or so) gives credence only to symptoms which can be objectively observed by the physician. Fundamentally subjective experiences (such as self-reporting of cross-sense experiences by synesthetes) tend to be discounted or rejected.

I can say that almost no one in the psychology/psychiatry profession with whom I have spoken has ever heard of synesthesia – until recently, since synesthesia has received more attention in the press. One psychiatrist

(quite young, I might add) had never heard of it before, and recommended that I have an MRI done to be sure there wasn't some kind of injury to my brain! I had to explain (emphatically) that synesthesia wasn't just some delusion I was experiencing, but rather a documented phenomenon.

It's kind of ironic that, of all people, doctors (and psychiatrists and psychologists in particular) should be the most incredulous.

Another synesthete friend, whose adolescent daughter is also a synesthete, wrote to me,

I've always been pretty open about sharing syn[esthesia] with others. Maybe because I find it so fascinating and feel it is a gift rather than a disorder. Most people have been interested and non-judgmental. Only two occasions have been met with hesitation and those were both by professionals who I assumed would be more open to variations from the norm than the general public. One was a professional counselor who gave me a look like I should be locked up and that ended the conversation. The second was my daughter's school teacher. My daughter is a syn[esthete] and I thought her teacher would find it interesting to learn about a different way that students may process information. She was open to the discussion but indicated she thought it was a very isolated instance and referred to it as a dysfunction rather than a gift. Even though my daughter is a gifted student. She told me later that she had spoken with her sister – a psychologist – who had heard of it but suggested that it would need to be "diagnosed". That word scares me. We haven't discussed it since.

Yet another synesthete – who works in a laboratory with researchers studying perception –wrote,

Mostly, I am just curious, but I'm considering being a little more open about my synesthesia. For the record, I've told my immediate family (my mother is a synesthete), about 4 close friends, and my coworkers at my summer job, since I work in a perception lab and my synesthesia could impact how I perform on certain perceptual tests. I've told a couple of professors (in the fields of psychology and neurology) and have to admit that I've gotten the strangest reactions from them. One thought I was a savant, and the other tried to offer his condolences for "my condition." (I got a laugh out of that one later.) It's this type of reaction that keeps me silent.

All three of these letters came from women in the United States. Far more serious was a series of e-mail letters I received about four years ago, when I first moved to Taiwan. The writer was from Ontario, Canada, the aunt of a synesthete teenager

who, apparently, had only the most common form of "category" synesthesia, colored letters and numbers. Upon revealing to his parents and teachers that "letters have colors", the boy's mother proceeded to take him to a round of psychologists and psychiatrists, all of whom could find no definite explanation, and most of whom resorted to a diagnosis of "schizophrenia". The mother, who determined that "something must be done", decided that her son must be institutionalized in a psychiatric clinic, "for his own good", until a cure could be found; the family doctor and a set of specialists concurred. The aunt, who had heard about synesthesia on a radio talk-show about six months before, was writing to me in desperation, one week before her nephew was to be institutionalized, begging me to provide her with references to literature about synesthesia which she could acquire and hand over to the boy's mother and doctors. I rushed to do so. The last message I received from the aunt gave indication that the boy had, nevertheless, been locked away for at least three years and perhaps indefinitely.

Unfortunately, this is by no means an isolated incidence. In the past four years, I have also received urgent e-mail messages from synesthetes in Chile, Peru, and Italy. In each of these cases, the synesthete had sought out doctors to get more information about their synesthesia, only to get caught in a complex web where one or more doctors, plus various family members, wanted to institutionalize them, or at least perform a series of quite potentially harmful tests involving drugs. With the Peruvian and Italian cases, the synesthetes eventually got away from the doctors and family members, and, last I heard, are no longer being pressured (or threatened) regarding institutionalization. I don't know what happened with the Chilean; I fear the worst.

Beginning about three years ago, I corresponded for almost a year via e-mail with a Canadian teenage girl (presumably from Toronto), whose parents had immigrated from India a few years prior to that time, and who was, at the time, a runaway living in the southern United States. Throughout the course of our correspondences, she kept herself anonymous, and moved from town to town about every three weeks. More than once, she told me that a main reason she had run away was that her father used to beat her severely every time she had mentioned any type of synesthetic experience (she only had the most common type, colored letters and numbers, but to an extremely strong degree). She claimed that her parents had taken her to numerous doctors in Canada and the U.S., virtually all of whom had suggested major psychiatric treatment, and many of whom had suggested institutionalization. She also told me that she was strictly forbidden to mention her colored letters in any way to any other people besides doctors, and was often locked up in her room and denied contact with any other people besides her immediate family. When I last heard from her, she was still roaming the southern U.S., had determined never to return to her parents, and had gotten a job (she wouldn't reveal where) as an artist – she based her artwork off of various things she "saw" synesthetically.

While speaking with a bunch of psychologists at a hospital in Taipei during a colloquium, I heard from a group who had recently been in Japan about the case of a Japanese girl, age somewhere between ten and fifteen, who had "colored music"

synesthesia similar to my own. Just that; nothing else. Her parents had just within the past three months signed papers to institutionalize her for life; this included being placed in a "padded cell" type of "security" room, being strapped down whenever it was considered "necessary", a full regime of drug treatment usually used upon the *severely* schizophrenic, and frequent heavy sedation. There was no statement whatsoever from any doctor as to a "diagnosis" of what the girl was "suffering" from; only statements that "treatment" was needed. The doctors I spoke with told me that they knew of at least two other similar cases, another teenage girl and a young boy.

Semiotics, among other things, attempts to explore how concepts are given meanings, and how those meanings interact, evolve and operate. Many of those meanings are based, in part, upon our perceptions. Which implies that our ideas about the world around us (our *Umwelt*), the thoughts we derive from our perceptions, and the meanings we give to these thoughts (thus creating new thoughts and elaborations) are influenced by the structures and functioning of our bodies – our "mind", which, while perhaps in many regards, is mainly the brain, may be said to be housed and shaped throughout the entire body. Yet our minds differ, and our brains as well as other parts of our bodies remain "plastic" throughout our lives, constantly – often rapidly – breaking down neuronal connections and "re-wiring" themselves into new connection networks (see Ramachandran & Blakeslee 1998; Gazzaniga 2000). However, how does this interplay with Cartesian notions of the separation of "body" from "mind" (see Baer 1988: 70-76)? We explore Trickster, in part, to look at plays on meaning, hidden meanings, multiple meanings, surprises and dangers in the layers upon layers of meaning, and alternate realities. Here, we are also looking at semiotics through Trickster to consider the enforcement of one reality at the cost of the denial of alternate realities.

Ramachandran compares certain aspects of synesthesia to one of his main interests, phantom limbs (see Ramachandran & Blakeslee 1998; see also Sacks 1985). With a phantom limb, although, in one "reality", the limb – say, a hand and lower arm – is not there, nevertheless, in another "reality", there are perceptions of different touches, cold, heat, and pain to the hand and arm. The phantom limb may not be seen, but it is felt and thus perceived. As Ramachandran discovered (Ramachandran & Rogers-Ramachandran 1996), this is not a hallucination or delusion upon the part of the amputee; rather, the amputee's brain has re-wired itself, usually within only three weeks – and sometimes as fast as one or two days – after the amputation. What happens is that the amputee's body receives stimuli to some certain specific part of the body – in the case of an amputated hand, it would most likely be the lower face, ipsilateral (on the same side) – and perceives touch, heat, cold and pain not only upon the face but also upon the no-longer-existing phantom hand. There is real stimuli to the face, and there is real perception at the phantom hand; but there is no hand, nor stimuli to the hand. Likewise, with my colored music synesthesia, there is real stimuli to the ear, and real perception of color; however, there is no concordant visual stimuli to my eyes.

Now, what makes this more unusual is that, in actuality, this phantom limb wiring

itself is not an "abnormality" *per se*. Apparently, we all have such wiring; thus, touches to our face also trigger sensations to our hands. However, we also have other feedback mechanisms resulting in *inhibiting* these perceptions so that they are ignored. That is, when touched on the face, our minds perceive two different areas of perception, and the brain picks one over the other. Such inhibitory mechanisms are not in the least unusual; conflicts and inhibitory mechanisms are going on with such basic things as recognizing you are viewing things in a mirror.

In my previous paper, I stated that one's reality is based, in part, upon one's acceptance of evidence to build "truths".

That there is ample evidence does not, in of itself, imply that a person must or will declare something as truth or existent. One can ignore or deny the evidence, or be oblivious to it, or declare it to be "lies" and thus process it in that form. "Truth" must be accepted as "truth", at some point, before further processing. Before that, it must at least be considered and accepted as "potential truth". [. . .]

The mind attempts to use logic to try to make sense of past experiences and predict future ones. In doing this, it may (or may not) learn from trial and error what are the useful rules of logic and what aren't. Realities are based upon these logic conclusions. If the logic is faulty, the reality may, nevertheless, still exist. Different operable logics will produce different (mutually agreeable or contradictive) realities. A logic system does not have to be inheritably "correct" to be operable, and humans can and do regularly operate within acknowledged contradictions (Day 1998: 162-163).

A question then emerges: What does the synesthete who is aware that, for example, the rest of the world does not see colors when hearing music, think about the "reality" of synesthetic perceptions? Most synesthetes that I correspond with tell me that they basically work along lines of "two (simultaneous) realities", "other people's reality" and "my reality". The concept of having multiple realities does not seem to bother them. Similarly, Ramachandran (Ramachandran and Blakeslee 1998) reports that amputees with phantom limbs tend to eventually start operating with two simultaneous realities, "the phantom limb *does* exist and *is* still there", and "the limb does *not* exist and is *not* there". However, unlike with synesthetes, most all amputees with phantom limbs cannot reconcile their two realities.

We, as humans, have a tendency to want to categorize things. When encountering something new, we will try to place it into one or more categories, and are far more apt to go with pre-established categories than to invent new ones. Not only do we have a general fear of the unknown, we also have a general avoidance of allowing a thing to remain wholly an unknown. One of our most common dimensions for attaching labels involves assessing the danger of something and thus declaring something "good" or "bad", "desired" or "dangerous".

In a sense, there is nothing new here. This is yet just another twist on the age-old question of the values we place upon our perceptions in attempting to define "reality". It might, however, be of interest to you to hear that the quite larger majority of "colored music" synesthetes I have corresponded with over the years were firmly convinced that *everybody* perceived music as colored; most of them were not shaken from this belief until well over the age of twenty. Last May 19th, the first annual meeting of the American Synesthesia Association was held at Princeton University. Unfortunately, I was unable to attend it myself. However, I received quite a lot of mail directly after the event. Perhaps *not* surprisingly, one of the things that most attendees mentioned was the coffee breaks between the paper and presentation sessions. Virtually every message I received, from synesthete and non-synesthete alike, mentioned how the synesthetes around the coffee and cookies were happily proclaiming, "Finally, I feel justified! After all these years, I finally feel like my way of seeing the world is just as good – is also real!"

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