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Bright Colors, Falsely Seen
Synaesthesia and the Search for Trancendental Knowledge

by

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Bright Colors
Falsely Seen

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When Darwin's ship, the Beagle, was moored off the western shore of South America, some natives were asked what they thought about the big boat out there in the water. "What boat? We don't see any boat, only a bird out there on the water." When faced with novel information, people will understand what they see based on the sum total of their previous experiences. What to the crew was a large ship moored offshore, to the natives, who had never seen a sailing ship before, was a strange bird on the water. We may laugh and call the natives foolish, but we would be missing an important point if we did. We live in a world in which each of us has a unique background of idiosyncratic experiences upon which we base and shape our understanding of the world. Some people among us have the ability to experience colors as an integral part of hearing sounds, a capability that is called *synaesthesia* and whose history is recounted in detail in this fine book. To understand how people with synaesthesia think and comprehend the world is as difficult for us as it was for the Beagle's crew to comprehend how the natives could think that their large ship was a bird on the water. And this is the task that Kevin Dann has set himself to do herein.

The natives whose curious cognition he investigated are familiar names to many: Rimbaud, Nabokov, Blake, Coleridge, Wordsworth, Shelley, and others. He investigated their perception by inspecting their reports of what they perceived. By directing our view to their reports we can decide for ourselves whether they were basing their understanding of the world on their innate abilities for synaesthesia or not. Vladimir Nabokov was provided the most intense inspection by Dann, and one is not able to deny from the large array of evidence that Nabokov was truly a synaesthete with strong eidetic memory capabilities.

In addition Dann set himself another parallel task: does the ability to see colors along with sounds contain more truth than the rest of us might receive from the same stimulus? Is synaesthesia a freak of nature visited on certain people or is it that these people have learned to hold into adulthood a capability that all of us possessed when we were very young? Do synaesthetes perceive and report on data that we all perceive unconsciously and know deeply, but unable to report on these phenomena, are able to react deeply to reports of those who can experience them? These and many other questions are answered during the course of this book, but only if one processes the data along the way. There are no easy answers to these questions that can be laid out in a simple table. The answers can only grow in the fertile soil of the mind of a careful and inquisitive reader.

Dann has, however, extracted from the extensive descriptive literature a set of seven diagnostic criteria for synaesthesia. (Summarized from pages 5 to 8)

1. **Synaesthesia is involuntary and insuppressible; cannot be evoked at will.**
2. **Synaesthetic percepts are perceived as projected externally.**
3. **Synaesthetic percepts are stable over one's lifetime. (Some tapering off of perfect**

pitch is noted in several cases)

4. **Synaesthetic percepts are memorable, that is, memories involving synaesthesia are often more easily and more vividly remembered than the original stimulus.**
5. **Synesthesia is emotional, almost always being associated with a narrowly circumscribed set of strong pleasant or unpleasant emotions.**
6. **Synaesthesia is very difficult to describe in words, giving it an ineffable for both synaesthetes and non-synaesthetes.**
7. **Synaesthesia occurs in people with normal, non-injured, non-diseased brains.**

The "Molyneux problem" (page 9) was this, "If a man born blind were to gain his sight in later life, would he be able to identify the objects around him by sight alone?" John Locke gave a definite No to this question, one that I would agree with. The evidence exists in Oliver Sacks' story of Virgil, the middle-aged man who was a functioning blind person until he regained his sight (lost near birth). (See Sacks' book, *An Anthropologist on Mars*.) Then he became a handicapped fully seeing, but not perceiving person. He was missing all the pattern recognition that allows seeing persons to resolve colored patterns into 3-D objects later in life. He spent a lot of time handling miniatures of buildings and cars. Had to close his eyes to find his way through his apartment without bumping into something. Had to mark off a single path, which if he followed with his eyes open, the patterns would resolve into 3-D, much like the ceiling murals in Rome look 3-D only from one viewing position in the room. The Molyneux problem didn't have much to do with synaesthesia, but I was delighted to find that this problem was known and had a name.

Dann tells us how Richard Brucke thought that not only ideas, but the human mind evolved, and set the stage for a new age's infatuation with the idea of an evolving mind. In distinguishing mind and brain, I imagine the brain to be a bulldozer and the mind its operator. The bulldozer is a physical object that has capabilities and limitations that accompany its current design. The operator, while physical, has thoughts about how to use the bulldozer that are non-physical, that come from a non-material or spiritual world. The thoughts of the operator are the equivalent of what I mean by my use of the word *mind* in this essay. Seen in this way, our brain is the physical object through which we control our body with our mind.

[page 48] *Cosmic Consciousness* differed radically from the traditional history of ideas, in that Bucke suggested that not only ideas but the human mind itself evolved.

What if our brain evolves but our mind does not? Suppose that our brain, like our other physical organs and limbs, evolves over time and provides us better and better ways of manipulating the sensible world, but all the while our mind, which is non-evolutionary (in the Darwinian sense), has stayed the same over the aeons of Earth evolution (except for karmic working out between Earth lives), but it learns to make the best in each age of its personal and evolving sensory gatherer and interpreter of the physical world, its brain?

The mind, able to perceive spiritual or super-sensible realities in every age, becomes less able to perceive them after five years old in an epoch when physical sensory realities are favored by its owner's peers and grown-ups. Children are carefully taught to avoid using their mind in ways that do not focus on sensory world experiences; their only alternative is being thought weird, and few will risk that circumstance.

Thus, my hypothesis, simply stated, is this: *minds do not evolve, brains evolve*. When we attempt to understand the mind with our brain, we're in for a great difficulty as our brain is only capable of dealing with sensory data from the physical world. The brain is not capable of perceiving super-sensible realities, only in reacting to them after the fact. Of storing pre-five-year experiences of them in doylic memory for later recall as emotions, etc. If we attempt to understand the brain with our mind, the situation is easier as the brain is physical matter, has evolved over time, has developed new capabilities and evidence for its evolution is extant in both fossil and literary records.

In my essay [The Childhood of Humanity](#) I explain how two forms of memory, doylic memory and cognitive memory, evolved sequentially over time and exist in parallel currently. Also, the essay explains

how our store of doylic memory stops being incremented at the time, about five years of age, when cognitive memory comes into full bloom. Nowhere in the essay is the word *mind* used, only brain. It occurs to me only now that the reason *mind* was not mentioned is that it does not evolve because it is a non-material entity and only material entities such as the brain may be said to evolve. This hypothesis will undoubtedly be unwelcome to the those new age theorists that wish to talk lasciviously about the evolution of the mind and evolution of consciousness as if they were somehow synonymous.

Rudolf Steiner, a natural clairvoyant from early childhood, was careful to distinguish the seeing of color associated with tones by a clairvoyant and by a synaesthete:

[page 62] It must be noted that by seeing a color, spiritual seeing is meant. When the clairvoyant speaks of 'seeing red,' he means: 'I have an experience, in a psycho-spiritual way, which equivalent to the physical experience when an impression of red is received.' . . . If this point is overlooked, a mere color-vision may easily be mistaken for a genuine clairvoyant experience.

One of the insights that the nascent science of doyletics brings is that the acquisition of [perfect pitch](#) by a child is possible if the child is exposed to the sounds of a well-tuned piano before five years old. The sound of each note when heard or sung by the child is stored as a doylic memory together with its name and the child as it grows up will be able to sing the note when given its name or name it with ease when hearing the note. Here's an example that Dann gives of a baby who gets to hear her music-teacher mother giving music lessons and learns perfect pitch while still in her crib.

[page 116] Lying on her back in her crib, Harriet could hum in perfect pitch, tempo, and phrasing various arias she had heard rehearsed by voice students of her music teacher-mother. . . she had absolute pitch, as was often demonstrated when her mother's pupils sang off pitch and Harriet responded by yelping in pain.

The close association of perfect or absolute pitch with synaesthesia hints that synaesthesia itself may be doylic in nature. If this is so, a simple doylic memory trace would be enough to remove some synaesthetic response.

[page 72] That Scriabin did not possess absolute pitch also argues against his being a synaesthete. The literature on synaesthesia is filled with descriptions of "tonal" chromoaesthetes who use their photisms to correct their pitch. Singers are alerted to deviations in vocal pitch because they "see" that their photism is of the wrong hue; when they modulate their voice to the right pitch, the color is corrected.

In his chapter "Sensory Unity Before the Fall" Dann tells us that Wheeler and Cutsforth's work showed that synaesthesia was integral with meaning (as Merleau-Ponty suggested in his *Phenomenology of Perception*, 1962), "because it could actually accelerate childhood learning, and that its subsequent disappearance as the new, more abstract linkages of language were formed was a normal process."

[page 94] Although they [Wheeler and Cutsforth] did not make it explicit themselves, their work implied that in most individuals, synaesthesia was usually superseded during childhood by kinaesthesia as the "mechanism" of meaning production.

This is a most interesting possibility as it suggests to me that in those children who are considered normal, the progression from synaesthesia to kinaesthesia took place; the remainder in which the move did not take place remained as synaesthetes. Kinaesthesia is a fancy name for storing a physical body state or doyle. A child hears a word and feels something as he hears the word. "Come to Mommy." his mother says as she picks him and ever thereafter the feeling of being held by Mommy is associated with the sound of the word "Mommy." Thus the meaning of the word "Mommy" accrues the good feeling doyles for the child.

In a 1936 study, D. M. Purdy studied an eidetic and synaesthetic woman identified as R. In a test for her

eidetic imagery and synaesthesia, she was asked to form a mental image of the sun.

[page 106] . . . she reported a glaringly bright image which lasted several minutes, so that it became painful for her eyes, which began to water. As the image faded, it turned into a purple disk with a white corona, identical to an afterimage of the actual sun.

The afterimage and eye-watering is crucial data, I think, because it indicates that the image was formed on the retina of R.'s eyes. That means that some ability existed within her brain/optic pathways to feed a remembered image *from her brain to the retina of her eyes* which is the opposite direction from what is normally considered to be only possible way: from the retina to the brain! The ability of remembered images to be formed on the retina of the eyes would indicate that a two-way passage from the brain to the retina exists in all humans, but only synaesthetes like R. use both directions consciously. This opens up new possibilities for considering the etiology of hallucinations of all sorts as being generated in the retina of the eyes. There is an alternative explanation for the after-image and eye-watering: the image of the sun was stored with doyles of eye-watering and the after-image itself, both of which were faithfully re-created upon remembering the image of the sun itself. This would be fertile ground for some research work to determine if remembered bodily states are solely responsible for the afterimage and tears or if the retina-brain data flow goes both ways.

Doyles are physical body states, *affects*, that are stored in the limbic region of the brain together with some visual or auditory input that when accessed later, either from an external stimulus or internal remembrance will trigger the *affect* or doyles associated with the original stored event that occurred before five years old. Here's Dann's description of that same process in his own words:

[page 143] What makes the eidetic image so powerful is that the original *affect* is also restored to the viewer, who re-experiences the emotional quality that infused the earlier perception of the scene, person, or object.

By being able to recall vividly scenes from his past with his eidetic memory, Nabokov was able to move at will in time, and this quality gives his writing a sense of transcendence that many have noted over the years.

[page 146] The result for the reader of Nabokov is a powerful sense that Nabokov's characters have achieved a sort of immortality by escaping time. That sense wholly depends on the convincing vividness with which Nabokov and his characters seem to see and feel events and objects from the past that nonsynaesthetes are unable to see.

What distinguishes Nabokov from the rest of us is that he is able to retrieve these vivid images (stimuli) at will and to move from one to another, recovering the *affect* or doyles with their original vividness. For the rest of us, to the extent that we have any feelings or emotions at all, we are performing Nabokov's feat with just as strong an *affect* or doyle, but we lack the ability to directly control the flow of the memories which seem instead to come at random. At random to a scientist means that we have not found the pattern in the data, up until now. Rightly understood, we are unconsciously doing all the time what Nabokov was able to do consciously.

There is hope for the rest of us nonsynaesthetes, however, because the simple act of doing a doyle trace involves us in *consciously* holding a doyle that previously only came unbidden (*unconsciously*) and moving back in time to before the original event, always a time before five years old. A basic characteristic of [doylic memory](#) is that it stops being created after five. When one performs these simple steps the affect will disappear and it will *not* arrive automatically upon the next presentation of identical stimuli. By this simple [speed trace](#), we will have acquired the ability to control our affect consciously like Nabokov, plus we will have acquired a new freedom from the onslaught of onerous affects.

Nabokov, with his powerful eidetic memory was locked to his vivid memories and lacked the relaxed freedom that most of us experience when we remember our past. In this next passage, Dann waxes lyrical

in his description of Nabokov's abilities and offers a realistic assessment of benefits and the disadvantages of his gift:

[page 159] We all display vestiges of the narcissistic perception. We must content ourselves with the drabness of unimodal sensory perception and the monotony of the present moment, while the synaesthetically and eidetically endowed Narcissus, forever young, forever gazing into the pool at his own reflection, lives in a sensory and temporal phantasmagoria. For Narcissus, time is frozen; empathic love is impossible; nothing ever really happens. No growth, no maturation; no death, but no life. Vladimir Nabokov emodies the paradoxes of both narcissism and synaesthesia.

With every advantage comes a distinct, but not always obvious disadvantage. This is a [fundamental tenet](#) of mine. Dann's detailed examination of Nabokov's life and his writings helps illustrate that tenet.

There is much in this book to be learned about the human being and how the senses and memory are organized. In many ways it is a reference book to understanding the origin of many important concepts in the history of humanity: how the concept *ontogeny recapitulates phylogeny* was first formulated, how eidetic imagery and synaesthesia are usually found together, how Jules Millet first coined the word synaesthesia, and many other unique advances in understanding human consciousness are collected in one convenient book.

[page 164] If these syncretic forms of perception [synaesthesia and eideticism] do indeed signal something about the evolution of human consciousness, we have not as yet fathomed what that is.

Perhaps not, but with Kevin Dann's book, we can begin to get our arms around the problem in a more comprehensive way than ever before.

