synaesthesia: past and present origins

one should pay attention to everything - john cage
synaesthesia: past and present origins

a thesis

presented in partial fulfillment of requirements of the degree master of arts

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This book abandons style.

This book does not move in a linear fashion, so abandons narration.

This book is less concerned with facts than metaphysics.

This book is not subjective, objective, nor non-objective, but all of these combined: extra-objective.

This book is an attempt to encompass what is known as synaesthesia, and yet is just a book.

A book does not eat so how could it know.
If one were to travel at the speed of light and hold a mirror in front of his face there would be no reflection.

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"All universities have been progressively organized for ever-finer specialization. Society assumes that specialization is natural, inevitable and desirable. Yet in observing a little child we find it is interested in everything and spontaneously apprehends, comprehends and coordinates an ever expanding inventory of experience." (3)

In order to come to a better understanding of anything, one must be able to comprehend the entire structure of it rather than concentrating on its single elements. Within the structure, one should not be limited to a parsing of the parts. Instead, an attuned sensitivity to the inherent relationships of the parts, and those which are brought to the encounter afford a broader, more insightful cosmological experience.

The exploration of structural relationships is predicated on abandoning, at the least, all conscious limitations if knowledge is to be attained. The system must be open-ended and allow for total interaction between the individual and that which he encounters.

SYNERGY is the system of the "many ways of knowing" and means that the whole is always greater than the sum of its parts.

"Synergy is the behavior of a system unpredicted by the behavior of any of its parts or sub-assemblies of its parts."
-gene young-blood (4)
1 \text{ face} \geq \frac{3}{4} f
As Merleau-Ponty has pointed out in "The Phenomenology of Perception," there is no quality of sensation so bare that it is not penetrated with signification.

"But the dim little meaning which dwells within it, a light joy, a timid sadness, remains immanent or trembles about it like a heat mist; it is color or sound. Who can distinguish the green apple from its tart gaiety? And aren't we already saying too much in naming 'the tart gaiety of the green apple?'" (5)

On the other hand, SYNÆSTHETIC is the term used to describe the experience that unifies self-awareness with multisensory perceptions into a meaningful whole.

(Synergy is the behavior of a system unpredicted by the behavior of any of its parts or sub-assemblies of its parts.)

To explain the concept another way: software, pertaining to the physical world (synergy), becomes the physical world as man's sense perceptions allow.
what is called synaesthesia, the splashing over of the impressions from one sense modality to another, is a fact to which all languages will testify. This is dangerous ground which
will have to be traversed.

- e.h. gombrich
To assume comparisons of a given world with given perceptions is fallacious. "The physical world is, in some general sense of the word, a deduced concept. Our problem is, in fact, to fit the world to our perceptions and not our perceptions to the world."(6) This action is by mature synaesthetic, i.e. information, data in all its parts, is received by each of the senses in a different way, then compared and computed for response in all possible combinations and permutations. "Perception is both sensation and conceptualization, the process of forming concepts, usually classified as cognition." (7)

This then is also the SYNCHRONIZATION OF SENSES; the removal of the barriers between the aural and visual in order to achieve unified relationships from two opposites, or if viewed from one's nose, disparate relationships from two alikes.

Synchronization can be of any combination; sight/sound, sound/taste, taste/smell/motion, sight/motion, etc. "Take the qualities of the different senses. For a long time it has been held that these qualities have nothing in common. And yet we can point at various examples which are at odds with this view."
Brightness and darkness, for instance, are attributes of both auditory and visual experience. Again, if an object we touch appears cool, its coolness somehow resembles visual brightness; comfortable warmth is dark in comparison."(8)

Sensory synchronization can present itself to the individual rationally, as "the sight I see corresponds to the sound I hear and the smell my nose inhales", or irrationally, as in the case of HARMONIC OPPOSITES.

Harmonic Opposites are made up of two or more rationally conflicting elements, such as, the visual image of a mouth eating sardines accompanied by the sound of breaking glass. The two apparently conflict in the rational sense. However, when considered synaesthetically, they form a matrix for psychic exercise. The viewer ceases to label what he sees and is forced to concentrate on the synaesthetic/kinesthetic flow of information. Literary and dramatic effect become secondary.

"Syncretism is a total field of harmonic opposites in continual metamorphosis; this metamorphosis produces a sense of kinaesthesia that evolves an inarticulate consciousness of the viewer's recognition of an overall pattern event." (9)
PEEP!
peep peep
PEEP
PEEP
PEEP peep!
(PEEP)

oom pa pa oom
pa pa RAT A TAT
A TAT A RAT A
TAT A TAT A oom
pa pa oom pa pa
RAT A TAT A TAT
A RAT A TAT A
oom pa pa . . . .
The opposite of synaesthesia is ANESTHESIA. Anesthesia is defined by Webster's New Collegiate Dictionary (7th edition) as:

AN*ES*THE*SIA n (NL, fr. gk anaisthesia insensitivity, fr. a-aisthesis perception, fr. ais-thanesthai to perceive): loss of sensation with or without loss of consciousness.

"Tranquilizers and anesthetics, private and corporate have become the world's largest business just as the world is attempting to maximize every form of alert."

(10) IBM sells "not just data but reality" as it is revealed that the government holds twenty million dossiers in its computer banks and people refuse to believe it or just shrug their shoulders.

These same people walk down 5th Avenue through a syncretism of humanity, anesthetized by their own busy routines, preconditioned against any possible scrambling of their directional stability. In other words, mass transit becomes a hypnotic human condition, and when there's a breakdown in this end to end organization, it's "back to the head lab for reser-vicing" or "break out the Scotch."
Television is possibly the most popular anesthetic of all. While there are great possibilities within the world of audio-visuals, the bulk of the TV viewer's time is passed in a non-cognitive stupor—"this product is non-narcotic and leaves no harmful side effects." Anesthesia relieves the stress of maintaining a rational way of life in a synaesthetic environment.
some historic events that lead one to believe that synaesthesia has been around for a long long time
It would give me great pleasure to claim that the elements of synaesthesia are a recent discovery of a few "avant-garde" artists, writers and filmmakers; however, this is not true. It is evident that many individuals before our time have toyed with the very same ideas that prevail in the most current of synaesthetic endeavors.

Synaesthesia has been around for a long, long time. In fact, it actually originated with the earliest man (although he probably could not have identified the term if you pointed it out in a book.)

Sensory synchronization is a vital element in music, art and literature and everyday life vis-a-vis music, art and literature. (If someone employs the use of or writes about sensory synchronization, sensory synchronization exists defacto.)

Romantics and symbolists were particularly intent on exploring the laws of synaesthesia. "Rimbaud assigned colors to the five vowels, thus translating auditory impressions into visual ones,"(11) while Bruyeres "Clair de Lune" and "Feux d'Artifice" by Debussy are all visual experiences projected through the workings of the piano.
Richard Hughes also transposes sensory information in his article, "Lochinvarovic":

"He gradually melted into the Infinite--already his bodily senses were left behind, or at any rate all mixed up; so that the little green tables of the cafe only penetrated to him as a tinkling arpegio to the blaring bass of sunlight, the booming sky outside; while the rattle of a passing bullock-cart was translated into a series of vivid flashes of color, and the discomfort of the rickety chair he sat on smelt bitter in his nostrils...."(12)

Alchemists have dealt with this idea for ages. An example of early experimentation was found in the DISCLOSURES OF MAGIC FROM TESTED EXPERIENCES OF OCCULT PHILOSOPHICAL SCIENCES AND VEILED SECRETS OF NATURE BY Karl Von Echartshausen:

"I continued this machine in all its perfection, so that whole color chords can be produced, just like tonal chords. Here is the description of this instrument.

I had cylindrical glasses, about half an inch in diameter, made of equal size, and filled them with diluted chemical colors.
I arranged these glasses like the keys of a clavichord, placing the shades of color like the notes.

Behind these glasses I placed little lobes of brass, which covered the glasses so that no color could be seen. These lobes were connected by wires with the keyboard of the clavichord, so that the lobe was lifted when the key was struck, rendering the color visible. Just as the note dies when a finger is lifted from a key, so the color disappears, since the metal lobe drops quickly because of its weight, covering the color. The clavichord is illuminated from behind by wax candles. The beauty is indescribable, surpassing the most splendid jewels. Nor can one express the visual impression awakened by the various color chords."(13)

In the 17th century, this color-sound synchronization was conducted by Archemboldo as an improvement over the ocular music invented by Pere Castel. (It is interesting to note the similarity of this experiment to recent endeavors using video tape-computer-moog components to determine the same coordination between color and sound.)
Yastrebtzev gives us further historically documented instances of synaesthetic effect in his memoirs of Rimsky-Korsakov on April 8, 1893.

"During the course of the evening the conversation turned to the question of tonality and Rimsky told how harmonies in sharps had personal effect on him of colors, while harmonies in flats conveyed moods of 'greater or lesser degrees of warmth' to him."(14)

Reading this memoir or the aforesaid examples one might respond that he or she does not feel that way about the words or musical phrases. They cannot be supposed to know that the writer or synaesthetician thinks that E is sky blue, that KH wears a beard and turban or that the initial X is a Greek with wrinkles.

Lafcadio Hearn, a romantic writer, answers such criticism:

"Because people cannot see the color of words, the tint of words, the secret of the ghostly motion of words:--"
Because they cannot hear
the whispering of words,
the rustling of the
procession of letters.

the dream flutes
and dream drums
which are thinly and weirdly
played by words:--

Because they cannot perceive
the pouting of words,
the frowning of words,
and the fuming of words,
the weeping, the raging
and racketing
and rioting of words:--

Because they are insensible
to the phosporescing of words
the fragrance of words,
the noisoseness of words,
the tenderness
or hardness,
the dryness or
juiciness of words:--
the interchange of values
in the gold,
the silver,
the brass,
and the copper of words:--

Is there any reason
why we should not try
to make them hear,
to make them see,
to make them feel?...(15)
Words are like lizards in their power of changing color with position...

...nowhere, in all the documentation of Hitler's rise to power and that events subsequent chronology is there mentioned the radio. Without it, Hitler would be an old man in Bavaria and the talks of tribal cheiftains Roosevelt and Churchill would have never carried beyond the glow of their den's fires. Without radio, we would not have jazz. "Radio enables the tribal world the art form based on syncopation or symbolism. Beat is touch, and the spaces of touch are intervals. Intervals are closure, which creates rhythm." (16)

These examples are but a few that set the stage for further developments of synaesthesia by contemporary man.
Gene Kelly and Leslie Caron strolling beside the Seine and suddenly dancing themselves into love (An American in Paris)
"Because we are seeking the rhythm of relationships, rather than content, it should be made clear that synaesthesia is a concept without boundaries or benefit of precise philosophical parentage." (17)

Although it has humanistic implications, synaesthesia goes beyond an actual historic framework. It draws upon many different philosophies and disciplines and carries much potential for man's further development and self-discovery vis-à-vis the art world.

Artists continually stress a sensorial harmonious balance in their work. The following are some examples.

The show of Robert Morris at the Museum of Modern Art was an attempt to employ an interaction of the senses. The desired outcome was an increased awareness of sense stimuli.

He devoted one room of the museum to four groves of blue spruce trees. According to the classic rules of Renaissance perspective, the trees were of diminishing size thus giving the visitor a feeling of increased space.
Morris also had the room filled with pine mist in order to render the visitor a more complete participant by bringing into play an interchange between the visitors' olfactory, tactile and visual sensations as well as his kinesthetic response to space.

George Santayana speaks of color with a new meaning in a discussion of Kandinsky's paintings.

"The value of colors differ appreciably and have pungent smells, as high and low notes, or major and minor chords, differ from each other by virtue of their different stimulation of the senses, so also red differs from green, and green from violet. There is a nervous process for each, and consequently a specific value. This emotional quality has an affinity to the emotional quality of other sensations; we need not be surprised that the high rate of vibration which yields a sharp note to the ear should involve the high rate which, to the eye, yields a violet color. These affinities escape many minds; but it is conceivable that the sense of them should be improved by accident or training. There are certain effects of colors which give all men pleasure, and others which jar, almost like a musical discord."
A more general development of this sensibility would make possible a new abstract art, an art that should deal with colors as music deals with sound."(18)

Kandinsky also worked in a synaesthetic approach with relation to form. Primarily concerned with sensory synchronization he perfected tactile/visual relationships with color and form. He showed how certain forms were harmonious with specific colors, such as, round shapes: soft-deep colors; angular shapes: bright-sharp colors. To put it another way, blue:circle: yellow:triangle.

By including bodily movements, Jackson Pollock in the 1950's paved the way for an extraordinary new stimulation of senses for the artist and the viewer of visual art. Having ever watched him in person or on film while he works, one can readily tell that his bodily movements are continuous and extensive. "I do step into the canvas—that is, working from four sides I don't have to get into the canvas much." (19)
In this manner, the exterior manifestation of the artist's inner self (i.e. the creative process), the exteriorizing of the central nervous system becomes the subject matter itself. This then is a kinesthetic sense of making art in addition to one that is purely visual.

Sensory interplay is not limited to one art form alone. Composer Karlheinz Stockhausen concerns himself in his work with more than just the mind and ear. He employs such terms as "sound-visions" in portraying sensory synchronization. In "Momente", members of the orchestra "snapped their fingers, scrapped their feet, giggled and whispered"(20). This type of orchestration, which makes use of sounds that can be heard anywhere, resembles an audio landscape as the different sounds evoke new and different visual images from concertgoers' unconscious.

Nat Hentoff asked John Coltrane if he ever tires of "My Favorite Things": "No, because once you get into the solos, it's wide open for any kind of creation you can get going."(21) This is possible because of Coltrane's commitment to constant improvising. That way no song need go stale. This is especially true of the dialogues that fit so well into the structure.
There is an intuitive sense at work also—he knows what to say and when. Throughout the song there is the persistantly counterpoint sound from the piano of Alice Coltrane. "Her value to the group is that she continually senses the right colors and textures of the sounds. And, in addition, she's fleet. She has real facility."(22)

In addition to the colorings and nuances, the aspect of Coltrane's work that is most apparent are the dialogues between him and Pharoah Sanders on soprano and tenor respectively. Here they attempt to delve more deeply into the human foundations of music which is made clear in the speech-like sounds of two men possessed by external forces. What is heard, if one allows himself to feel and hear, are two artists trying to strip themselves to the marrow of their being. The resulting personal aesthetic makes almost every exposure to his work a memorable experience.

Just as if one does not allow himself to let Coltrane's music in, so too is the possibility of mistaking synaesthetic cinema for something which it is not. The dialogues of "My Favorite Things" are not cacophonous, although superficially they might "appear" to be.
a can function as a
conditioning force
to unite us with the
living present, not
to separate us fro
m it.

synaesthetic cinem

gblood — gene youn
In the same way, the film "Empire" by Andy Warhol might be repetitious but the purpose of it's repetitious image is two-fold. One, it provides a mounting intensity ("is this boring!"*) and two, it relays the message as a unified whole (synergy) i.e. to repeat the image intensively so that the viewer is forced to seek out elements within it ("many ways of knowing") beyond those which are already apparent to him.

Synaesthetic cinema is not repetition alone. Other criteria demand it to be one continual, unified perceptual experience—a space-time continuum where time is irrelevant. There is no story, no plot. It can be a metamorphasis of one image constantly becoming another, facilitated by superimposition (inside and outside coming together). The elements of synaesthetic cinema are all equally significant. With structure and content synonymous, it is a matrix for psychic exercise. It is a single or series of images that are non-linear, non-pragmatic.

Synaesthetic cinema is "...the space between desire and experience." (23)
"To prestylize reality prior to tackling it amounts to dodging the problem. The problem is to shoot and manipulate unstylized reality in such a way that the result has style." (24)
I,

Andy Warhol 1966 Photo David Bailey.
Andy Warhol 1966

Photo David Bailey
Andy Warhol 1966

Photo David Bailey
Andy Warhol 1966

Photo David Bailey
Andy Warhol 1966

Photo David Bailey
"the child's capacity to comprehend a total structure rather than analyzing a single element... he does not differentiate the identity of a shape by watching its details but goes straight for the whole."
--anton ehrenzweig
Synaesthesia is a quality that is very basic to man but is usually aculturated out of him long before he becomes an adult. All of a child's early experiences cram his virgin mind with images of touch and taste, sight and sound, sound and smell, etc. When mobility allows, what is heard or seen must be touched, tasted and smelled as a natural response because that is what early child experiences are all about from the beginning; that is, the natural or inherent response of touching a warm breast, discovering a nipple, tasting it, hearing a familiar voice, seeing a familiar face, etc.

Synaesthesia begins as a survival mechanism that relates warmth and moisture to pleasure (though sometimes discomfort), a harsh voice to pain, and many other sensations that connotes life on a basic scale.

With added information, survival becomes a more complicated consideration, so the older child develops a quality to meet this need. He begins by developing it for sheer pleasure in his vast free time before being induced to channel his attention into specific directions. Children at play demonstrate the complexity of image relationships in their minds when they create things out of objects that may not seem to correlate visually but relate through their own perceptions to the subject that they are representing.
Certain traits of early tribal man can also be considered synaesthetic. It is said that their lifestyle (although often very complex, it is based on survival in the natural environment) enables them to develop their multisensory awareness to a peak.

In the language of certain American Indian tribes, a simple idea is expressed in terms of its sensory experiences. For example, "going to a party" would be said: "going to the place where the fire is made among the people to cook the food for a good time we all will have." In effect, we are mentally taken to the party through all its experiences.

Another such example is given by Edward T. Hall in the *Silent Languages*: "He reveals many of the non-verbal gestures by which whole cultures communicate. He tells us, for example, that an eight inch interval between speakers is normal and friendly in the Arab world. Beyond eight inches it is not easy to smell one's interlocuter, he stops talking and begins gesticulating. A rather similar incident occurs in the *Bald Soprano* when the Smiths and the Browns, in the midst of a painful English silence, meet each other for the first time. The dialogue goes: 'Sniff...sniff...sniff...sniff...sniff...sniff...sniff...'" (25)
For the Arab, eight inches is a threshold between two different language experiences. Unfortunately for the Smiths and the Browns, they were not aware of the possibilities of their sniffs, but they are not children or tribal. Obviously, communication for the tribal man is much more enlightening.

As a hunter, tribal man treats his prey as an equal or even greater element of his environment than himself. He often experiences it as a flesh and blood creature but also as a spiritual force encountered in dreams and visions. According to Jung's definition of the collective unconscious, dreams arise from the unifying force that encompasses man. Through the collective unconscious, man encounters reality in another dimension.

Synaesthetic man is the original man, the aborigine. When man grew out of the cradle and the forest, he lost something. In a highly cultured surrounding, survival mechanisms are logically based. But in a highly cultured surrounding survival demands can effect a relatively small part of the mind's scope. It depends on whether one wishes to advance linearly in the culture scheme where survival and advancement are an end in themselves, or if one wants to expand around survival demands, synaesthetically.
how much input can you put in
If one has a little time, he can sit back and absorb the environment with all his unused senses. To approach a real state of synaesthesia, however, one must drop all prejudices and let conceptions form in the mind and evolve continuously. In this way, one is not channeled to solve riddles but to become (themselves) riddles and parts of riddles.

"The child's capacity to comprehend a total structure rather than analyzing a single element ... he does not differentiate the identity of a shape by watching its details one by one but goes straight for the whole." (26)

The intent is not to try to make each fragment the whole but to accept the whole in its fragmented form. A child can not force his mother to make him feel secure; he does interact with her and through this interaction finds security. In the same way, man cannot dominate the universe. He can project his will onto it, or he can interact with it--viewing himself as equal to or lesser than the other parts.
"Syncretism is a total field of harmonic opposites in a continual metamorphosis; this metamorphosis produces a sense of kinesesthesia that evolves inarticulate consciousness of the viewer's recognition of an overall pattern-event." (27)

To be a synaesthetic man, one must loosen the grip on the conceptions that are in the mind to allow for new relationships of sensations, images, thoughts. One must let the conceptions of this thesis slip away to form new ones from one's own conceptions of how the paper smells and the kind of room you're in....
anesthesia is
the opposite of synaesthesia
the opposite of sensorial
activity
makes one unable to
respond on a physical
or psychological
level
renders one incapable
of responding
sensorily to
environmental stimuli

in a corner
asleep
with a black sheet
draped around
and then
tied up
BIBLIOGRAPHY


Castel, Louis-Bertrand. ESPIRIT, SAILLIES ET SINGULARITÉS DU P. CASTEL. Amsterdam: 1763.


FOOTNOTES

1. from KING OF HEARTS, United Artists, 1967.
12. ibid., p. 68.


15. ibid., p. 92.


21. Hentoff, Nat. COLTRANE/LIVE AT THE VILLAGE VANTAGE AGAIN. (album cover)

22. ibid.


(1-2) 2001, Stanley Kubrick, 1968. (4)
"I saw the continuing generation striving for an easy fix."

- Sullen Hunsbee