

Ramifications of Julian Jaynes's Theory of Consciousness for Traditional General Semantics

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Good morning. Thank you for coming. In my talk, first I will explore why General Semantics theorists over 70 years generally have overlooked the human behaviors that give rise to the sharpest and most violent of today's conflicts of world views—namely, religious behaviors. Second, I will introduce some theories formulated by cultural anthropologist Julian Jaynes which "explain" religion and which have helped me extensionalize my own definition of the so-called "verbal levels", a General Semantics term I previously had defined intensionally. I will close by haranguing you briefly with an argument that the perspectives opened up by Jaynes can help us strengthen General Semantics doctrines.

I trace the general neglect of religion by General Semantics theorists back to Korzybski's own proud rejection of religious influences. He said this to students at the 1948-49 Institute of General Semantics intensive seminar:

I was born a Pole in Warsaw in a very peculiar family. My father was an engineer and for generations they were either mathematicians or senators, lawyers, economists, engineers, what not – all scientific, scientific, scientific. ... [T]he milieu of the country was Catholic, but we didn't have any need of any religion. We were not agnostic, we were not atheists, we were just scientific for generations, so although the milieu was Catholic, I was not contaminated.... This was very fundamental in my whole work. I was completely free.¹

Korzybski's freedom came at a price. Thanks to his freedom, he hardly understood religion, even failing to recognize the religious content in a major event in his own life.

Please look with me at the "Silent and Verbal Levels Diagram", which Korzybski first produced in 1943 and which he later titled "The Process of Abstracting from an Electro-Colloidal Non-Aristotelian Point of View."² I want to use the diagram to make the point about Korzybski's weak understanding of religion. Note the label on the "happenings" at Level I: external *or* internal happenings. I ask you to imagine that this person – myself -- wants to understand pregnancy. Due to gender limitations, the internal happenings to which the name "pregnancy" applies never have and never will occur inside me. *All* chain-sequences of abstractings that might produce some pregnancy understanding in me *necessarily* must pass outside those people in whom pregnancy happenings can and do occur. *My* understanding of pregnancy, built up from abstractings circuitously routed through books, pictures, oral narratives, etc., – compare that to the potential understanding of an equally informed person who is or has been pregnant, especially a person who has been pregnant until term and/or pregnant on multiple occasions. Which person's abstraction almost surely preserves more intrinsic characteristics of first, second and third-level pregnancy? Which person's abstraction has lost signal strength and become more cluttered with extraneous characteristics? The abstracting process that produced Korzybski's understanding of religion parallels the process producing my understanding of pregnancy.

The understanding of religion conveyed in that statement, I submit, amounts to little when stacked up against the understanding of a well-informed person who is or has been religious, especially a person who has been religious for a long time and/or religious on multiple occasions.

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Who was Julian Jaynes? A New Englander, the son of a Unitarian minister, Jaynes lived from 1920 to 1997. Single throughout his adult life, Jaynes lectured in the psychology department at Princeton from 1966 to 1990. His only published book, The Origin of Consciousness in the Breakdown of the Bicameral Mind, appeared in 1976. In its September, 1978 issue, ETC., A Review of General Semantics published James E. Morriss's 11-page essay review, "Reflections on Julian Jaynes's The Origin of Consciousness in the Breakdown of the Bicameral Mind." In the same month, Ralph Kenyon, who has published both in ETC. and in General Semantics Bulletin, wrote in his paper "The Nature of Science:"

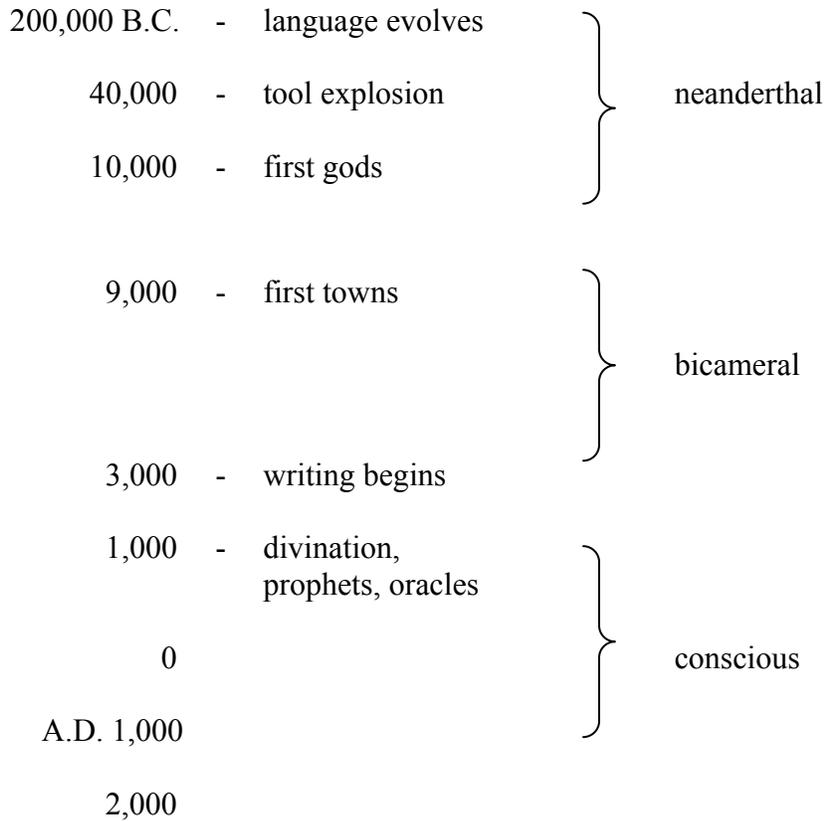
Traditional philosophy answered a few basic questions: The nature of the universe, man's place in the universe, ... the nature of God.... What province these questions belong to now seems apparent: The nature of the universe—that which can be found out—[belongs to] science, empirical science, in particular, physics and cosmology. Man's place in the universe—that which can be found out—empirical science and anthropology. The nature of God—Julian Jaynes's studies of consciousness place this issue in "the middle of" linguistic, cultural anthropology.⁴

Jaynes, who by the evidence currently available knew nothing of General Semantics, does not make God or religion a central concern in his writing. However, he uses religious data to bolster his theories of human language development and the origin of consciousness. In his book and his papers, Jaynes presents religion as deeply-rooted human behavior, free of "supernatural" components and capable of a doctrinal expression wholly compatible with General Semantics.

This morning, I very much want to stir your interest enough to start you reading this book. If you aren't familiar with Jaynes's theories at all, please know at the start that he believes our human ancestors lived and labored and built civilizations without consciousness until as recently as 1000 BCE. He explains consciousness as an invention, like mathematics, made possible once human language developed to a sufficiently elaborated state. Consciousness persisted, he argues, thanks to its survival value after complex social interactions had broken down the prior mechanism for human decision-making, what Jaynes calls "the bicameral mind." If I say things that sound vague or wrong or strange or obnoxious – and by the way, Jaynes's language is not at all gender inclusive -- please keep listening with an open mind as best you can. I wish to start my presentation of Jaynes by again referring to the abstracting diagram.

Unrevised since Korzybski's death in 1950 but still a standard reference point for General Semantics teaching²⁰⁰³, this diagram captions Levels I, II, and III as "Silent" and "Non-Verbal". After reading Jaynes, I now see that this representation of the human abstracting process leaves out the verbalizing our earlier ancestors produced over tens of thousands of years. Only we recent humans have generated the labels, descriptions, the naming and "talking about" that belong to the diagram's Level IV. Sub-Level-IV verbalizing, overlooked in the formulations of traditional General Semantics, persists in all humans today and underlies the semantic reactions

of religious behavior.⁵ The string of direct quotes I am lifting from a 13-page span in The Origin of Consciousness in the Breakdown of the Bicameral Mind gives the relevant evolutionary time line hypothesized by Jaynes. The chart is from his paper "How Old is Consciousness?"⁶:



The first stage and the *sine qua non* of language is the development out of incidental calls of *intentional calls*, or those which tend to be repeated unless turned off by a change in behavior of the recipient. Previously in the evolution of primates, it was only postural or visual signals such as threat postures which were intentional. Their evolution into auditory signals was made necessary by the migration of man into northern climates, where there was less light both in the environment and in the dark caves where man made his abode, and where visual signals could not be seen as readily as on the bright African savannahs. . . .

The first real elements of speech were the final sounds of intentional calls differentiating on the basis of intensity. For example, a danger call for immediately present danger would be exclaimed with more intensity, changing the ending phoneme. An imminent tiger might result in 'wahee!' while a distant tiger might result in a cry of less intensity, and so develop a different ending such as 'wahoo!'. It is these endings, then, that become the first modifiers, meaning 'near' and 'far'. And the next step was when these endings, 'hee' and 'hoo', could be separated from the particular call that generated them and attached to some other call with the same indication.

The crucial thing here is that the differentiation of vocal qualifiers had to precede the invention of the nouns which they modified, rather than the reverse. And what is more, this stage of speech had to remain for a long period until such modifiers became stable....

The next stage might have been an age of commands, when modifiers, separated from the calls they modify, now can modify men's actions themselves. Particularly as men relied more and more on hunting in the chilled climate, the selective pressure for such a group of hunters controlled by vocal commands must have been immense. And we may imagine that the invention of a modifier meaning 'sharper' as an instructed command could markedly advance the making of tools from flint and bone, resulting in an explosion of new types of tools from 40,000 B.C. up to 25,000 B.C.

At this point, let us consider ... the origin of auditory hallucinations. . . . The most plausible hypothesis is that verbal hallucinations were a side effect of language comprehension which evolved by natural selection as a method of behavioral control....

Behavior more closely based on aptic structures (or, in an older terminology, more 'instinctive') needs no temporal priming. But learned activities with no consummatory closure do need to be maintained by something outside of themselves. This is what verbal hallucinations would supply.

...[I]n fashioning a tool, the hallucinated verbal command of "sharper" enables nonconscious early man to keep at his task alone. Or an hallucinated term meaning "finer" for an individual grinding seeds on a stone quern into flour. It was indeed at this point in human history that I believe articulate speech, under the selective pressure of enduring tasks, began to become unilateral in the brain, to leave the other side free for these hallucinated voices that could maintain such behavior.

... [O]ne further step had to be taken, the invention of . . . names. It is, I suggest, as late as the Mesolithic era, about 10,000 B.C. to 8000 B.C. when names first occurred. . . .

Up to this time auditory hallucinations had probably been casually anonymous and not in any sense a significant social interaction. But once a specific hallucination is recognized with a name, as a voice originating from a particular person, a significantly different thing is occurring. The hallucination is now a social interaction with a much greater role in individual behavior. . . .

It is the open-air Natufian settlement at Eynan which shows this change most dramatically. Discovered in 1959, this heavily investigated site is about a dozen miles north of the Sea of Galilee Three successive permanent towns dating from about 9000 B.C. have been carefully excavated....

I have suggested that auditory hallucinations may have evolved as a side effect of language and operated to keep individuals persisting at the longer tasks of tribal life. Such hallucinations began in the individual's hearing a command from himself or his chief. There is thus a very simple continuity between such a condition and the more complex auditory hallucinations which I suggest were the cues of social control in Eynan and which originated in the commands and speech of the king.

Now we must not make the error here of supposing that these auditory hallucinations were like tape recordings of what the king had commanded. Perhaps they began as such. But after a time there is no reason not to suppose that such voices could "think" and solve problems, albeit, of course, unconsciously. The 'voices' heard by contemporary schizophrenics 'think' as much [as] and often more than they do. And thus the 'voices' which I am supposing were heard by the Natufians could with time improvise and 'say' things that the king himself had never said.... Thus each worker, gathering shellfish or trapping small game or in a quarrel with a rival or planting seed where the wild grain had previously been harvested, had within him the voice of his king to assist the continuity and utility to the group of his labors.

We have decided that the occasion of an hallucination was stress, as it is in our contemporaries. And if our reasonings have been correct, we may be sure that the stress caused by a person's death was more than sufficient to trigger his hallucinated voice....

If this were so for an ordinary individual, how much more so for a king whose voice even while living ruled by hallucination....

At Eynan, still dating about 9000 B.C., the king's tomb – the first such ever found (so far) – is a quite remarkable affair. The tomb itself, like all the houses, was circular, about 16 feet in diameter. Inside, two complete skeletons lay in the center extended on their backs One wore a headdress of dentalia shells and was presumed to have been the king's wife. The other, an adult male, presumably the king, was partly . . . propped up on stones, his upright head cradled in more stones. . . .

I am suggesting that the dead king, thus propped up on his pillow of stones, was in the hallucinations of his people still giving forth his commands. . . .

This was a paradigm of what was to happen in the next eight millennia. The king dead is a living god.⁷

Before adding one selection more to this extended strung-together lifting of text from Jaynes's book, I want to paraphrase what Jaynes has hypothesized in the quotations just read. According to Jaynes, after the advent of language but before the advent of consciousness, human volition occurred as speech organized in one part of the brain – call it functionally the experience/intuition/inspiration center – and "spoken" or heard in different auditory centers of the brain. (I am skipping the physiology of all this, although Jaynes has lots of that in the book.)

Their language development yet too primitive to support the invention of conscious mind-space, in which an "I" can narratize and question, our automaton-like human ancestors "obeyed" hallucinated voices. Jaynes finds excellent substantiation for his theory in Homer's Iliad. My extended quotation now concludes:

During the eras of the bicameral mind, we may suppose that the stress threshold for hallucinations was much, much lower than in either normal people or schizophrenics today. The only stress necessary was that which occurs when a change in behavior is necessary because of some novelty in a situation. Anything that could not be dealt with on the basis of habit, any conflict between work and fatigue, between attack and flight, any choice between whom to obey or what to do, anything that required any decision at all was sufficient to cause an auditory hallucination. . . .

Why should such voices have such authority . . . ?

Sound is a very special modality. We cannot handle it. We cannot push it away. We cannot turn our backs to it. . . . Sound is the least controllable of the sense modalities

Consider what it is to listen and understand someone speaking to us. In a certain sense we have to become the other person; or, rather, we let him become part of us for a brief second. We suspend our own identities, after which we come back to ourselves and accept or reject what he has said. But that brief second of dawdling identity is the nature of understanding language; and if that language is a command, the identification of understanding becomes the obedience. To hear is actually a kind of obedience. Indeed, both words come from the same root and therefore were probably the same word originally. This is true in Greek, Latin, Hebrew, French, German, Russian, as well as English, where 'obey' comes from the Latin *obedire*, which is a composite of *ob* + *audire*, to hear facing someone.⁸

I expect a lot of you know this next story. It's Korzybski's account of how he came to produce the Structural Differential. In the tapes from the 1948-49 intensive seminar, he adds some detail, including the fact that he was trembling as he mounted the podium. Here's the version published on the IGS website:

Shortly after *Manhood of Humanity* was published, I was invited for a symposium before the New School for Social Research in New York. To me the school was rather important because there were a lot of serious people there, educated, who took life seriously, and scientific research seriously. The school was then dominated by John Dewey and John Watson, the behaviorist. Both of these men heard something about my *Manhood of Humanity*, in which I claimed that man is *not* an animal, but in a category by himself.... [T]o them ... it was all 'bunk'....

In the meantime, as that group in the New School was so important and so intelligent, I was very eager to make good to that particular class in spite of Dewey and Watson, and I was eager to convey the difference between the reaction of man and dogs, cats, and so on. . . . I was struggling with myself how

to convey that fundamental difference, and somehow under that stress, pressure of necessity – I would even use the word 'emotional stress' – of conveying what I wanted to convey, as a flash, a diagram occurred to me, the diagram which today is known as and called the 'Structural Differential'.⁹

Korzybski's experience at the New School correlates to Jaynes's stress theory for induced hallucinations, triggered when a novel problem needs solution. In Korzybski's case, given his well-known predisposition to visual rather than verbal "thinking," he hallucinated a diagram, not a stream of words.

Jaynes suggests that the content of stress-produced hallucinations comes from "stored-up wisdom."¹⁰ Myself, I call Korzybski's happy epiphany at the New School a religious event. In doing so, I don't say he was "touched by an angel." I have no high-order abstraction to inferentially explain what was going on at Level 1. I have no pressing need to hypothesize what sparked the flash of inspiration that produced the Structural Differential. I *will* say that while in General Semantics we traditionally characterize all human behavior events as the activity of an organism-as-a-whole-in-an-environment, in religion we consider an alternative characterization of the same events as the activity of the environment-as-a-whole-in-an-organism. This second characterization, though perhaps greatly inferior for most scientific work₂₀₀₃, may have advantages for investigating and explaining such phenomena as hypnosis, telepathy, or the Quaker "gathered meeting."

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Most people with religious lives are convinced that religion "works." By cultivating with prayer and service the bicameral voices within him/her/me, the religious person arguably lives better for himself/herself/myself and for others. I said I will close by haranguing you with an argument that perspectives opened up by Jaynes point to an opportunity to strengthen General Semantics doctrines. According to Jaynes, humanity today finds ourselves in transition between bicameral and conscious volition. His book supplies the promoters of consciousness, we people in General Semantics, with one big "Eureka!" – a formulation of religion that speaks to the depths of religious behavior as manifested in so many conflicts in the world today. We have not had this previously.

But, armed with the one new formulation, before we rush to mount our white steeds and gallop off to convert the heathen to "consciousness of abstraction," consider how unconvincing we must appear to Smith₁ out there—or, better stated, Mohamed₁. Willing and subscribing members of the culture and the nation that incarcerates as criminals the highest percentage of its own people, that arms tyrants to control the populations of non-U.S. jurisdictions, that stuffs the elderly into nursing homes, we Americans (yes, I am generalizing) have made the pursuit of individual "happiness" life's main mission. Bicameral Mohamed₁ should declare independence from his extended family, should give up his five daily prayers and should replace his "zakat" or property gifts to the poor and needy with what – a weekend in Las Vegas?

As I said earlier, Jaynes has only passing interest in God and religion. In this book, in his many essays, over a lifetime of work, he pursued passionately one central interest, an understanding of what we call "consciousness." I submit that we in General Semantics have no answers to give Mohamed₁ until we first show we can make a difference in our own back yard. And I believe

that those of you who will read Jaynes will exclaim a second and louder "Eureka!" upon discovering there a uniquely operational definition and in-depth understanding of consciousness and its current limitations. In service to the main objective in our educational program, to teach "consciousness of abstracting," I ask you: Please, investigate what Jaynes has to say.

¹ Alfred Korzybski. "Intensive Seminar: December 27, 1948 – January 3, 1949." Brooklyn:Institute of General Semantics. 2001. Casette 1, Side B.

² Korzybski. "An Extensional Analysis of the Process of Abstracting from an Electro-Colloidal Non-Aristotelian Point of View." General Semantics Bulletin, Ed. M. Kendig. Numbers 4 and 5. Lakeville, CT: Institute of General Semantics. 1951. 9-12.

³ Korzybski, "This I Believe." Manhood of Humanity by Alfred Korzybski. Englewood, NJ.: The International Non-Aristotelian Library Publishing Company. 1993. li.

⁴ Ralph E. Kenyon, Jr. "The Nature of Science." 1978. <http://www.xenodochy.org/gs/natofsci.html> . From the same author, see also "Julian Jaynes" (2003). <http://www.xenodochy.org/gs/jaynes.html> and "Confronting the Challenges of Conflicting World Views" (2003). <http://www.xenodochy.org/gs/ccwv.html> .

⁵ Once I recognized that the Korzybski diagram provides no level assignment for verbal commands, e.g. "Stop!", I then began to notice the same failure to represent other classes of verbalizing such as exclamations ("Ouch!"), supplications ("Help..."), affirmations ("Yes..."), etc. – author.

⁶ Julian Jaynes, "How Old is Consciousness?." Exploring the Concept of Mind. Ed. Richard M. Caplan. Iowa City: University of Iowa Press. 1986. 60.

⁷ Jaynes, The Origin of Consciousness in the Breakdown of the Bicameral Mind. New York: Houghton-Mifflin. 2000. 131-143.

⁸ Jaynes, *Ibid* . 93.

⁹ Korzybski, "Historical Note on the Structural Differential." http://www.general-semantics.org/Basics/AK_sdnote.shtml .

¹⁰ "Stored-up wisdom" carries a certain ambiguity. Jaynes evidently wanted to restrict the store of wisdom available to any given individual to what accumulates "inside" that individual. However, marine biologist Alister Hardy (The Living Stream: Evolution and Man. New York: Harper & Row. 1965. 286-287) hypothesized a "subconscious shared reservoir of ... 'know-how' ". Allowing this possibility in no way invalidates the rest of Jaynes's theories. Jaynes and Hardy both emphatically dismissed Carl Jung's speculations of "collective unconscious." Jaynes: "Jung had many insights indeed, but the idea of the collective unconscious and of the archetypes has always seemed to me to be based on the inheritance of acquired characteristics, a notion not accepted by biologists or psychologists today." ("Response to the Discussants." *Canadian Psychology*. 1986. Vol. 27 (2) April. Transcript from Canadian Psychological Association Symposium, Halifax. 1985). Hardy: "I must confess that I find it exceedingly difficult to understand [Jung]. ... He appears to speak in riddles. Particularly do I find it almost impossible to obtain a consistent account of what he really means by his concept of the collective unconscious and the influence of the archetypes." (The Biology of God. London:Jonathan Cape. 1975. 117.). -- author.