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Intra-terrestrial Intelligence

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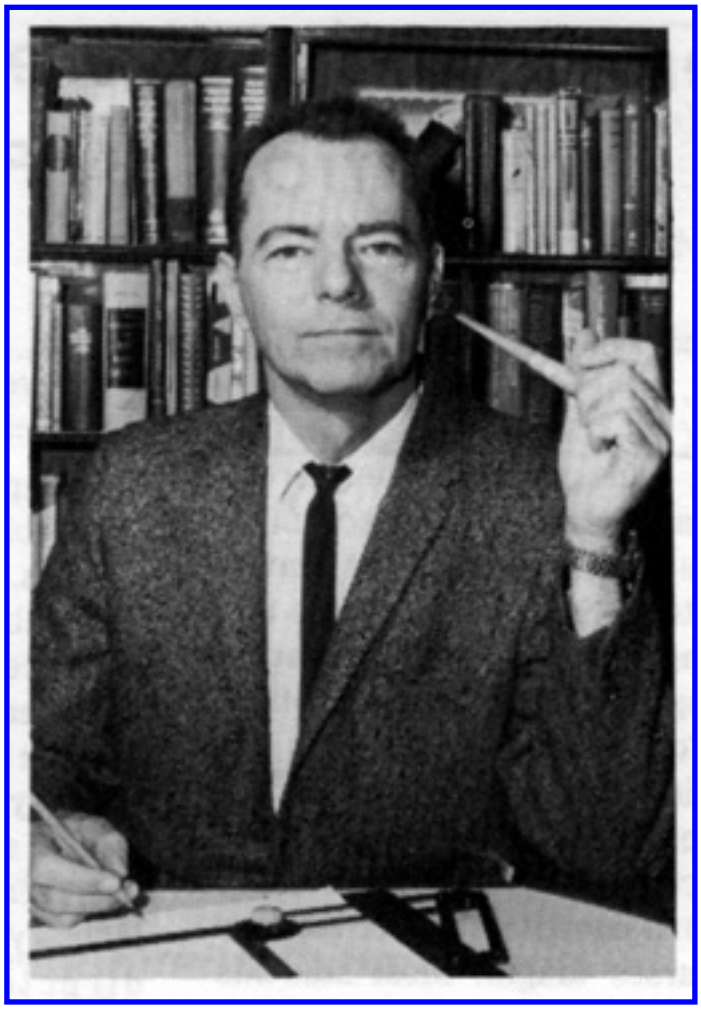


Today we diligently seek contact with extra-terrestrial civilizations. I wonder what the response would be if someone announced such a civilization might exist right here on this planet. I can hear the editor now, "Oh no, not another one of those!" What if I announced such beings actually exist and they possess inconceivably massive brains but that a panel of experts has determined that their lives are governed only by primitive instincts? It was decided a brain of those ridiculous proportions would be incapable of functioning because the signal impulses between cells would be short-circuited since they are probably bathed in a salty electrolyte. Indeed, it was decided the mass we call a brain — only because it is in the creature's head — is not a brain at all but probably only a nutrient storage chamber while the creature's seat of primitive intelligence is elsewhere.

Who am I? Why, I'm an ant. We call ourselves Red Harvesters. The civilization we are investigating is called the human race. Its members are indeed primitive. Each time we go forth to harvest, they go out of their way to step on us or poison us. Our dislike for them is monumental. We bite and sting them every chance we get.

End of simile

I am one of the humans described in the simile. For the past 40 years I have owned and operated a pet Harvester colony at a remote corner of my property. I have observed and experimented with the little creatures and at times caused them much consternation. Others before my time have done likewise. On many occassions [sic; "occassions" should be "occasions"] I have transported one to my desk — keeping it in a small bottle until it calmed down — then turned it loose on a piece of white

paper. They all behaved the same — walking very slowly in a small area. I would contact it with a hair placed in a pin-vise. Touched on the head, each would alternately tap the hair slowly with its antenna. Touched on the thorax side it would open its pincers and turn its head — slowly like a dog — toward the hair. But, it wouldn't seize it. It seemed more curious than frightened or angry. The slow deliberate movements are in contrast to anger and fright. Further experiments revealed the insect's response was more animal-like than insect. The following experiments show why I question instinct as being the answer to behavior.

• Place a Harvester on a spread newspaper. It turns to travel toward its original direction. Rotate again and the ant turns again toward its original direction. Will we say this is because the sun's position provides this orientation? How does it accomplish this with a June sun almost directly overhead? How does it do this under a completely overcast sky?

• It is mid-day in a blistering Arizona desert sun. Harvesters have carved a highway through tinder dry weeds 40 meters from headquarters to where I placed a pile of grain, on a gravel driveway about 10 meters from the shade of side vegetation. Noon is approaching and no self-respecting Harvester will be caught in that furnace without some protection — even if it be the shade of a pebble. If they are caught in the heat, they rest in shady areas until later, then resume their journey. About 40 centimeters to one side of the highway — out in the open — is a small dense green weed. Harvesters coming and going make a right angle to its shade. How did they know it was there? Instinct or eyeball?

• While in the shade a Harvester releases its seed, preens,

then picks it up and resumes — again at right angles back to the highway.

• With a stop watch in one hand and a propane torch in the other I become a shameful assassin and exterminate a few near the grain pile. I start the watch and retreat to a glass legged platform next to the colony's ground entrance 40 meters away. Harvesters are streaming in with seeds and back for more.

Atop the platform, 5 to 6 minutes pass. Quite suddenly the outstreaming begins to diminish. By 10 minutes, none are going onto the highway. Those with seeds continue to stream in until the highway is vacant. As a double-check, the heads of several were dotted with yellow water base paint. Trips away from the nest ceased before any tracers arrived. How was the signal transmitted to arrive ahead of those first arriving from the scene of the disaster?

• Literature dismisses sight as an element of orientation because of being "tiny and crude". Why then does the Harvester work only during daylight hours (exclusive of the scorching hours)? After dark and all night the highway has zero traffic. Only within a few centimeters of the nest entrance is there any activity and very slow at that. If the Harvester's eyes are so crude why is light required for distant activity — even on overcast days?

• At a later date when traffic is again high, watching this time from the grain end and repeating with the torch, I noticed those running from the scene transferring information to those approaching. Those in turn retreated and transferred to others. Such information is transferred within a fraction of a second to two seconds by either a brief touching of antennas or a single or half orbit around each other, while in contact. What is their means for instant contact communication?

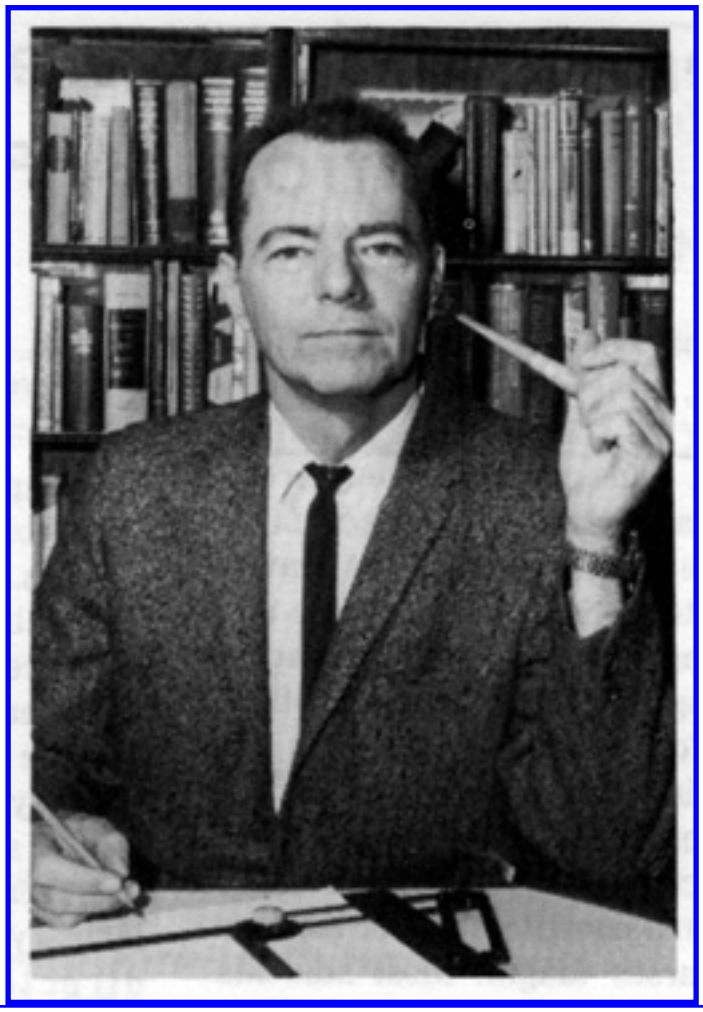
> I have observed this procedure progress back to where they are all streaming toward home. This kind of information travels considerably slower than does the information relayed back to stop the column during the 6 to 10 minutes immediately following the torching. There appear to be two modes of communication: (a) Direct transfer and (b) Remote transfer. Sound familiar?

We take for granted that such life-forms are guided by instinct. How do we know it is instinct? Mainly because — once out of the egg the creature appears already fully educated? Or is this the case? How do we know alien planetary life doesn't come already programmed from the egg? We don't, but if true would such conditions pre-empt scientific investigation with a mental block? Are we doing this to the ant and other social insects?

Could it be possible that such insects have intelligence comparable to higher animals but instead of existing on a cellular level exist on a molecular level? The cranial dimensions of the Harvester are 3 by 3 millimeters by 1.5 millimeters thick. Since transit time for internal signals depend on distance might we assume that thought processes would be so rapid that a lot of information may be passed on to another by a mere touch? In view of solid-state technology transit times vs. active element dimensions this seems likely.

Would such head dimensions if placed at one focal point of a high resolution spherical reflector with an appropriate sensing element placed at second focal position produce ant noise? Due to proximity, processes inside the ant's head might provide energies equivalent to that received from some celestial sources. I realize voltages required for solid state integrated circuits are many order of magnitudes greater than we can expect from an ant brain, but improvements might be possible.

I would like to extend an invitation for someone to join me in making suggestions, proposing antenna and low-noise amplifier designs and finally share the results with me. My laboratory would be adequate and most of the hardware and time would require no outside funding to proceed. It is indeed exhilarating to anticipate what might be discovered. Forty years experience in applied physics will offer an advantage.



William A. Rhodes is a problem-solving research physicist and inventor residing in Phoenix, Arizona. He holds over 30 patents covering a wide variety of inventions. The titles of a few of the patents are: "Steering Control for Aircraft", "Shearing Device for Bone-Holding Pins", "Beryllium Extraction Process", "Solar Turbine", "Body Fluid Transfusion Method", "Muffler for 2-cycle Engines" and "Unidirectional Horizontal Seismometer".

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