

*Some months ago, I was searching the literature and came across a title that was quite a surprise. It was a recent book edited by Dr. Stuart Ellins entitled **John Garcia: Life of a Neuroethologist and History of Conditioned Taste Aversion**. I knew of Dr. Ellins' excellent work on aversion conditioning with coyotes (see below) and knew of his association with John, but I had no idea that his work and association had resulted in a book. I immediately ordered and read it. The book was exactly as advertised, i.e., it was an interesting and fascinating history of John Garcia (as told by John). Some of the material will be familiar to many in the field, especially those who have grown up with John, the phenomenon of aversion learning and John's unique take on the paradigm that he introduced; much of the material on John's early life and his political, social and cultural views, however, will be new to most people, even those with a longstanding association with his work and with aversion learning. In addition to these personal highlights and recollections, a number of John's previously published seminal works are included that characterize his views on science, in general, and taste aversions, more specifically. While attempting to locate Dr. Ellins to ask a bit about the history of his work that led to the Garcia autobiography, I came across another of his books, specifically, **Living with Coyotes: Managing Predators Humanely Using Food Aversion Conditioning**. I immediately ordered and read this as well. It reinforced my earlier impression of his work and intensified my interest in contacting him. I eventually made contact with Dr. Ellins who was gracious enough to draft (on very short notice) a sketch of his own history with John and of the publication of John's autobiography. What follows is this sketch.*

*Ellins, S. (2007). **John Garcia: Life of a Neuroethologist and History of Conditioned Taste Aversion**. Outskirts Press, Inc.: Denver, Colorado.*

*Ellins, S. (2005). **Living with Coyotes: Managing Predators Humanely Using Food Aversion Conditioning**. University of Texas Press: Austin, TX.*

John Garcia: Life of a Neuroethologist and History of Conditioned Taste Aversions:

Perspective by Stuart R. Ellins

As a comparative psychologist, my early research involved comparing the behaviors of a variety of organisms, from bats to rats, in a laboratory setting, which I found to be very restrictive and time consuming. I have always felt that behavior should be studied in the environment in which it occurs naturally rather than in an artificial setting under highly controlled conditions. And, to be honest, for me the laboratory was just plain boring. I am sufficiently educated in the sciences to understand the function and importance of experimental control, but I have always asked myself if this is what the animal would do being exposed to many different stimulus conditions and having many other options in its niche. For similar reasons, I also had difficulty finding interested students to assist with my research as I was very busy with teaching and administrative duties at the university at which I was employed.

My solution to these problems was to branch into any type of animal behavior research that could be conducted out of doors in the fresh air and natural surroundings of the animals that I studied. This was especially appealing in California where I had access to wide open spaces in the mountain and desert regions that were close to my home and work and that I loved to visit. But what could I study in an environment that was sometimes forbidding and seemed to be devoid of animals that were typically studied by a psychologist that was primarily interested in the behavior of critters mostly found in the laboratory?

Many years ago in graduate school, I was exposed to a variety of research paradigms, including that of a little known scientist at the Harvard Medical School named John Garcia. His research on a phenomenon that was relatively unknown in the annals of experimental psychology and biology was somewhat curious in that it was at the same time unconventional, yet intriguing. That phenomenon was then called conditioned taste aversion (CTA). The work at the time was criticized because it was not considered to be well controlled and it appeared in the literature in abbreviated form; but that is another story. Through the years, I never forgot about my first exposure to CTA and I noticed in the literature that John Garcia and his students continued to explore its merits both in laboratory and field studies. I thought perhaps the field application of CTA would be something that would interest me and would get me out of the lab.

My first opportunity to meet Dr. Garcia occurred at a Sacramento meeting of the Western Psychological Association in 1975. We met in a hotel bar where we discussed CTA and the numerous possibilities for its application in the real world. In a sense it was

a fortuitous meeting in that it led to the solution of problems for both of us. It turned out that the Commissioner of Agriculture of Los Angeles County was soliciting John to begin a CTA program in the Antelope Valley north of Los Angeles where sheep farmers were complaining that coyotes were killing their lambs. Although I came to find that John is an ethologist at heart, mainly interested in animal behavior research as it relates to the solution of real world problems, he did not have the resources to engage in such a project. And there I was, a local comparative psychologist who was eager to become involved in applied research in the natural environment. John set up an appointment for us to meet with the Commissioner who granted us modest funds to begin an attempt to avert Antelope Valley coyotes to domestic livestock. The groundwork for such a project was previously laid by one of John's students, Carl Gustavson at the University of Utah, who found that coyotes and wolves could be taste averted to sheep in one trial after eating mutton adulterated with lithium chloride, a nontoxic emetic. The predators not only found the taste of the prey disgusting, but also avoided on the basis of olfactory and visual cues. At that point, John Garcia and I became research partners and ultimately friends.

Over the succeeding years, I often visited John in his lab at UCLA where we discussed the progress of the Antelope Valley research and we met with his students to review their data and the directions of their CTA studies. John always threw in his views on the merits of CTA and generally on his philosophy of science. John Garcia was always the scholar. I must confess, however, that frequently I had no idea what he was talking about until thinking about it while driving home from these meetings. Then a light would go on, and I invariably thought "It is so simple. Why didn't I think of that?" In our discussions John was able to incorporate his ideas on CTA and animal behavior in general into his world view which included such topics as human behavior, politics and racial injustice, which he cared about a great deal. He was also very critical of the publishing establishment which he lambasted in several pointed yet humorous papers, viewing himself as the Don Quixote of the scientific literature.

John Garcia was always a prolific writer. His numerous papers not only covered the experimental data produced in his lab but also applications of the CTA paradigm to a wide variety of topics. I always believed, however, that he should consolidate his experimental results and personal thoughts into a book which would be of value to the scientific community and to the general readership. For years I hounded him to produce such a work, but he never seemed to be interested. I was also vaguely familiar with John's family history and his childhood in Northern California, of which he seldom spoke. Where did such a brilliant and fascinating man come from? What were his roots and his early experiences?

One day after I retired from academic life, a package arrived in the mail at my home from John Garcia. He is also retired and at the time was living with his wife in the state of

Washington. Upon opening the package I was amazed to find three copies of a bound manuscript. In a short handwritten note he indicated:

S.E.

I finally gave up writing my autobiography after completing my childhood bit. The collected reviews complete my scientific life.

J.G.

The biography was entitled “From Nino to Scientist: the trip of my life (1917-1932). I was astonished. In the first ten chapters, John described the trials and tribulations confronting his family in 19th century Spain and his early years growing up in a farming community in Northern California with his Mom and Pop, five brothers, aunts and uncles and an assortment of interesting characters. These early experiences contributed greatly to his ideas about animal behavior and to his development as a scientist.

I called to thank him, and he told me that he and his wife Inez did not own a computer so he dictated the entire manuscript to her which she typed on a typewriter. A formidable task as I found out for myself for it took me several weeks just to retype and edit it on my computer. I then decided to attach to his biography some of John’s most comprehensive papers covering his research results and his personal views to represent his “scientific life” in a book entitled “John Garcia: Life of a Neuroethologist and History of Conditioned Taste Aversion.” The process of finding a publisher was arduous at best. One thing I learned as I mailed query letters to and was rejected by just about every college and university press in the country is that all publishers are in business primarily to make money. I certainly don’t begrudge them the opportunity to earn a profit, but in this case I felt that this is a book that is sufficiently important on which to take a chance. The problem that was communicated to me was that the book fell in the seam somewhere between the biography of an important scientist and a scientific treatise on CTA. It was great reading and had implications for the development of aspiring young scientists, especially those of Hispanic descent, but parts of it were also technical and somewhat esoteric. The book was at the same time appealing to the popular press and to academics. So how would they market it? Who would buy it? I was especially distressed at the University of California Press’s rejection of the book on these grounds because John Garcia should certainly be considered a “favorite son” of that great institution. Ultimately, I settled for self-publishing in the hopes that I could market the book myself, at least to college and university libraries in hopes of generating some interest. The book is now available from Amazon.com and Barnes and Noble.com.

I am proud of this book and I hope that it will help ensure John’s legacy as a prominent scientist and humanitarian for years to come.