

# The Chomsky/Everett Debate

~Through the Lens of Elliott Jaques~<sup>1</sup>

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The Chomsky/Everett debate revolves around Chomsky's theory that there is a universal grammar utilized by all languaging hominins, and Everett claims that language is culturally constrained and he has found a language that does not incorporate universal grammar. Tom Wolfe recently stepped into the discussion.<sup>2</sup> I will attempt to clarify this dispute using cognitive science as well as ethology and primatology as advanced by Elliott Jaques.<sup>3</sup>

There are two critical omissions in the Chomsky/Everett debate rendering the positions ships passing in the night, Everett's rudderless. Though Chomsky has been credited with ushering in cognitive science, neither he nor Everett apply it in a disciplined way. The other omission is basic primatology and ethology. Had they applied the work of Elliott Jaques and Jane Goodall, we would see that Chomsky's "Universal Grammar" may be validated, and Everett's "Cultural Constraint" is inapposite. There are hints, however, that Everett may be persuaded to reconsider and come to understand that his field work may have stumbled upon something important to paleoanthropology, as well as linguistics. That is, the "language" that he studied in the field is not full-scale language at all, but first order signaling. The significance is that as hominins developed full-scale language, non-languaging hominins disappeared. Or did they? Has Everett, without realizing it, discovered a missing link?

There are fundamental problems with either approach: an inconsistency in the use of terminology, lack of careful definition, and significantly, no analysis of complexity of information processing. Chomsky, when

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<sup>1</sup> The reader should know that my analysis includes extensive study of Jaques' work and correspondence with persons working in and with Requisite Organization. Catherine Burke, who wrote *Systems Leadership* with Ian Macdonald and Karl Stewart, has observed: "You might want to note others who have contributed to SST — Wilfred Brown, Gillian Stamp, Ian Macdonald, Lucy Lofting, Karl Stewart and a number of others. It is not simply people who follow Requisite Organisation who have applied and developed this work. Elliott's ideas about 4 orders of human information processing was first put forward by Ian Macdonald (I have seen the original paper) and later adopted by Elliott (without giving any credit to Ian) which is why that is not widely known."

<sup>2</sup> Wolfe, *The Kingdom of Speech*

<sup>3</sup> Jaques, *The Life and Behavior of Living Organisms*

considering evolutionary aspects, observes an unexplained evolutionary jump to full-scale human languaging with its universal characteristics. However, he does not attempt to assess cognition. Everett uses the term culture to explain the lack of abstract stories, difficulty with counting and limited reference to past or future. Everett is defensive about the suggestion of any cognitive limitation. Neither view recognizes the significance of the disengagement that occurs as sapiens develop second order complexity of information processing.

Obviously, Everett the fly catcher, or Everett the underdog, is the stuff of story, but Tom Wolfe, surely operating in good faith, only confuses matters with his use of the term “speech.” Wolfe appreciates the wow factor, the sheer power of language, but he fails to acknowledge that speech is only an element of language. He does not attempt to illustrate the powerful feature of full-scale language that occurs quietly inside, with mulling things over, analysis and problem solving, before speech or putting pen to paper. Jaques describes this as disengaged conscience languaging. In delightful irony, it is Wolfe’s own ability to disengage, to understand past and future, to craft linear and parallel sequencing, to manage abstract concepts and, finally, to tell a good story, that separates him from Everett’s subjects. The bulk of that happens without speech, but it is language.

While Jaques’ theory has been applied for decades in managerial science, it has important, fundamental, implications for all behavioral sciences, paleoanthropology and neuroscience. Jaques’ Stratified Systems Theory (SST) of human capability to carry out work is applied around the globe through Requisite Organization (RO) in organizational design and capability assessment.

In resolving the Chomsky/Everett dispute, it is necessary to have a more structured basis in cognitive science. Jaques provides a foundational system with which to analyze the issues. It makes no sense, to those who understand SST, that such a debate would ensue without reference to a methodology so carefully packaged and readily available in applied form. The evolution of language will never be understood without first explaining the jump from first to second order complexity of information processing. It

is that jump, or as Jaques has said, “mutation to disengagement,”<sup>4</sup> that makes full-scale language possible.

Compared to Jaques’ approach, which includes the application of time span of discretion and complexity of information processing, Everett's work is tedious in its lack of scientific underpinning. He applies a smug QED after the statement, “Therefore it is not possible in practice to translate from all languages to all languages.”<sup>5</sup> This conclusion comes from his analysis of a “language” that has no past and future, no abstract references, no invented characters, and no apparent disengaged conscience language. It is not full-scale language.

It is also frustrating when Everett examines the role of gesture in language, and culture, with no reference at all to signaling. I suspect that would confound Jane Goodall. This frustration is illustrated by a scenario Everett describes: A worker is struggling with a task and two observers note his wallet is about to drop. “The first observer looks at the second observer with raised eyebrows, looking at the wallet. The second one sees him and simply shakes his head to indicate ‘no’.”<sup>6</sup> Everett then goes on with a discussion of gestures and culture. There is no acknowledgment that in primatological and ethological terms, this scenario is classic signaling. In Jaques’ terms it may be first order complexity signaling, but signaling nevertheless. A primatologist could simply replace the men with apes, and replace the wallet with a dominant male’s shiny object, banana, or nearby female. The eye contact interaction, or warning, is virtually the same. It is signaling. Signaling is used by non-languaging organisms, and was presumably used by pre-languaging hominins. It is also used by humans when engaged in communicating matters in the here and now.

As is so often the case when venturing outside the hard sciences, there are definition and terminology issues. The following observations may be helpful:

Full-scale language is the language that Chomsky characterizes as having universal grammar and, as Jaques explains, includes the disengaged conscious languaging (quiet mulling things over, problem solving, invention

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<sup>4</sup> Jaques, *The Life and Behavior of Living Organisms*, p.180

<sup>5</sup> Everett, *Dark Matter of the Mind*, p.271

<sup>6</sup> Everett, *How Language Began*, p.232

and abstract consideration) of adult humans who are capable of second order complexity of information processing.

Signaling is a means of communication utilized by non-languaging and pre-languaging organisms, as well as full-scale languaging humans. It deals with the here and now and is to be differentiated from disengaged, quiet contemplation, mulling, consideration, and problem solving, including alternative ways of solving a problem.

“Cultural constraint” is a term, used by Everett, which remains undeveloped and should simply be abandoned in this discussion. In Jaques’ world, the dynamics of the culture of a management accountability hierarchy suggests that the capability of its members can either constrain, or advance, a culture. Further, a large population is required to find the cultural influence of an adequate compliment of higher capability members.

Can we please, in scientific discussion, finally abandon the notion of a mind. Such unscientific dualism is not helpful.

Everett’s descriptions demonstrate that what he has found in the Amazon is not full-scale language, and therefore he does not challenge Chomsky. His descriptions confirm that his subjects operate only in the here and now, with no evidence of second order cognitive complexity. His examples of communication are examples of signaling. His descriptions of behaviors reveal first order complexity with no examples of the big bang jump to second order. This is exciting in evolutionary terms. As Jaques points out, pre-languaging hominins did not survive. Thus, Everett may have found an important evolutionary link.

I understand why Chomsky is dismissive of Everett, and think Everett's challenge of Chomsky fails. However, I believe Chomsky doesn't fully understand why Everett's hypothesis fails and doesn't see other potential value in his work, value that Everett also does not understand. Of course, it is possible they are both willing to sacrifice cognitive science out of fear of being labelled racist; blow back which can be “hard tar to remove.”<sup>7</sup>

It is curious that Chomsky told Wolfe, in a phone conversation, that Everett’s subjects could easily learn Portuguese.<sup>8</sup> If Everett's descriptions

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<sup>7</sup> Wolfe, *The Kingdom of Speech*, p.129

<sup>8</sup> Wolfe, *The Kingdom of Speech*, p.147

are accurate, they could not utilize Portuguese in a disengaged, second order of information complexity. That is, it appears that Everett's subjects would be unable to use Portuguese to introduce discussion of the past or future, or to mull over alternative solutions to problems, or create stories about things or notions beyond direct and immediate interaction with the environment. As Jaques might observe, there would still be no "Once upon a time...."

While linguists and scientists continue to argue and publish about the origin of language, there is little development of the cognition factor. Yet tucked away in management science are people who are able to assess the cognitive capability of individuals in connection with role suitability, organizational design and managerial accountability. Consultants apply Jaques' system of assessing complexity of information processing developed over sixty years of scientific study. It is Jaques' SST that can resolve the Chomsky/Everett dispute and provide a more enlightened interpretation of Everett's field work. Perhaps a win-win can be fashioned.

Chomsky's theory of a universal grammar with its recursion and embedding pertains to "full-scale language," and what Everett claims to be a culturally constrained exception is advanced signaling; or, at best, a proto language or a pre-language. It is certainly not a full-scale, or even prototype full-scale, language. In fairness to Everett, I think he kind of gets what is outlined here. I suspect he struggles with the role of cognition and the possibility of a missing link. The cognitive tools, and insight, provided by Elliott Jaques could enable him to take the next step.

*Respectfully submitted,*

*Mark Goodall*