GEORGE MILLER & NOAM CHOMSKY'S CONTRIBUTIONS TO NLP

The people who obviously contributed to NLP and the development of the NLP Model were the three communication "magicians" (Perls, Satir, and Erickson) and the two "grandfathers" of NLP— Gregory Bateson who taught and mentored them all and Alfred Korzybski who invented the very idea of "neuro-linguistics" and "neuro-semantics." Yet there were others. Other contributors that made NLP what NLP is today who may not be so obvious. Two of them were the founders of the Cognitive Psychology Movement: George Miller and Noam Chomsky. Both men created a distinction in 1956 that changed the face of Psychology which has led to dating *The Cognitive Psychology Movement* to 1956.

Noam Chomsky and Transformational Grammar (TG)
What Noam Chomsky did in 1956 was publish the Transformational Grammar (TG) model in his *Aspects of the Theory of Syntax.* In doing so landed a death-blow to Behaviorism. For half a century from John Watson's original work in Behaviorism and B.J. Skinner's work, in associative conditioning, Behaviorism or Learning Theory was the Psychology of Choice. It had proven useful and effective in many areas. What Chomsky demonstrated was that Behaviorism was inadequate in explaining language development. In fact, he showed that it did not work. He demonstrated that we have a "language acquisition device" within us by which we learn language.   That's why children learn *as it were* the rules of language and then invent sentences that they have never heard. It's not mere association.

In T.G., he presented language as rule-organized and governed. He further sought to demonstrate that by mapping out all of the transformational rules. To do that, he distinguished surface statements from deep statements and created hundreds of "transformational rules" that govern how we move from one level to another. This was revolutionary and a tremendous jump in terms formulating a way to conceptualize the role of language in human functioning.

This is what John Grinder studied. He did his doctorate in TG and wrote his dissertation on Distortions. Then, two years prior to the launch of NLP, he published the essential content of the Meta-Model in a book on Transformational Grammar with Susette Elgin. The book, *A Guide to Transformational Grammar* (1973) offers almost everything that's in the Meta-Model, but not in the form that we know it. That's why I have said in several places that my view is that he was looking for a mechanism whereby he could offer it more practical in order to catch public attention with it. Of course, that's what happened with the development of Meta, which was later named, "Neuro-Linguistic Programming."

It just so happened that Perls used two distinctions that Grinder could use to connect and Virginia also used two linguistic distinctions. This allowed Grinder to then introject the

Transformational Grammar (TG) model and, with the team, create the NLP Communication Model— the Meta-Model [*]. And in the first books of NLP, *The Structure of Magic, Volumes I and II,* and in the appendix he put in a summary overview of TG. But thereafter TG did not continue to play a significant part of NLP. It was never put into any other books or appendices. And today, it is completely gone. Why? One reason is that in 1976, Chomsky himself dis-avowed Transformational Grammar saying that the model really did not work. The model broke down in too many places. Those who continued his work created Generative Linguistics, and after that Space Grammar, and eventually Cognitive Linguistics— where it is today. Another reason is that NLP did not need it. All we needed was "levels" and we had that in Korzybski's work and in Bateson's work. So we did not need the levels of TG to substantiate the language in the Communication Model of NLP.[1]

George Miller and Cognitive Psychology
What George Miller did in 1956 that changed the face of psychology was publish his famous paper, *"The Magic Number Seven Plus or Minus 2."* This paper introduced the language of "chunks" of information and presented the amount of information that we can hold in *conscious* awareness. This language soon was adopted in the 1960s during the early development of Artificial Intelligence (AI). Then in 1960 George Miller with Karl Pribram and Eugene Galanter published the book, *Plans and the Structure of Behavior* which introduced the Test-Operate-Test-Exit (TOTE) model for how to follow the internal processes from "behaviors" are created. Both of these developments were revolutionary and with them (and Chomsky's *Aspects of Grammar,* 1956) launched the Cognitive Psychology Movement (*Origins,* James Eicher, p. 125).

What is the connection of these developments with NLP? John Grinder did a post-doctorate study for one year in George Miller's laboratory (1969-1970) (*Origins,* p. 139). Miller mentored him! Then in 1977-1978 Grinder, Bandler, DeLozer, and Dilts took the TOTE model added the representational systems and created the Strategy Model for out to model the structure of experience.[2] While Dilts wrote this in papers in 1978,[3] this first showed up in a book when Bandler and Grinder commissioned Dilts to write *Neuro-Linguistic Programming, Volume I, The Study of the Structure of Subjectivity* (1980). So the key distinctions of the Cognitive Psychology Movement became incorporated into NLP *from the beginning.* This is why NLP is recognized as an expression of Cognitive Psychology and in Psychology books is put in the chapters on Cognitive Psychology.[4]

From these roots came the details for *how to model a subjective experience.* Without the work of Miller and associates and the TOTE model, NLP might have struggled for years trying to figure out how to sequence or structure what happens inside "the black box" (Behaviorism's term for internal experience). Bandler and Grinder and the original group did not create that— they took into the revolutionary breakthroughs that were just occurring and combined them with representational systems (which came from numerous other people) and presto! *the Strategy Model* of NLP.

References:
1. I wrote about this history extensively in *Communication Magic* (2001, formally, *Secrets of Magic,* 1997). Those who picked up Chomsky's work were George Lakoff, Mark Johnson, Ronald Langacker, etc. Randy Allen Harris wrote about the history of TG in *The Linguistic Wars* (1993).

2. Today Grinder goes so far as to deny that the TOTE is an NLP pattern. "There are no applications of the TOTE in any applied process pattern... In what sense, then, is the TOTE part of NLP?" (*Origins,* p. 141).
3. See Robert Dilts' books that contain his original papers, *Roots of NLP* (1983) which includes his 1976 paper on NLP. *Applications of NLP* (1981).
4. I noted in *The Spirit of NLP* (1997) that Burl E. Gilliland along with co-authors, Richard James and James Bowman put NLP under "Cognitive Psychology" in the tenth chapter, (pp. 249ff), *Theories and Strategies in Counseling and Psychology* (1989).*

[*] Die NLP Akademie Schweiz ist nicht glücklich mit dem Begriff 'Meta-Model', da dieser keinen Bezug auf den Inhalt des angesprochenen Modells nimmt. Wir empfehlen deshalb den Begriff 'Meta-Model of Language' oder 'Metamodell der Sprache' zu nutzen. Damit wird sofort klar, was gemeint ist.