Patterson's Quantum Grammars are Conceptual Quantums are Linguistically Structure [sic] Complement Sets -- Reply by Moonhawk [Q-Mind list] 25 May 2000

Alexander Patterson writes:

Intro. Over the last several years there has been a lot of talk about Quantum Grammars and Quantum Linguistics, not surprisingly by linguists.

[moonhawk] I plead guilty to the latter, and I know my colleague A.L. (Clem) Ford in Montreal is doing the former.

[Alexander Patterson] Unfortunatley none of the linguists who speak about these two kindred notions make an attempt to understand the critical areas of quantum mechanics which are relevant to a possible quantum theory of linguistics (and intentionality for that matter). As has been noted before, the notions of a Quantum Grammar and of a study called Quantum linguistics becomes a mere metaphor.

[moonhawk] First, I'd like to point out that the nascent not-quite discipline of Quantum Linguistics is still wide open. Plenty of room to grow without rudely elbowing your predecessors out of the way. The rudeness I find is the proposition that any notion of Quantum Linguistics which does not include syntax (or "the critical areas ... relevant to [your] possible quantum theory") is a mere metaphor.

After all, I assume you analogize, if normal linguistics (seen wrong-headedly to be syntax driven) is like classical physics, which is mechanics (seen 100 years ago to be matter/energy-driven), then **quantum linguistics** MUST be like ... **quantum mechanics** (unfortunately, badly named), and therefore must ALSO be syntax-driven, as the analogy applies. The problem is that -- no matter the current wrong-headed craze in linguistics -- Syntax does not equal Grammar which does not equal Linguistics.

Syntax is one system of Grammar, which also includes phonological, morphological and other grammatical systems. Grammar is but one system of a Language, which includes semantic, phonetic, cultural, and other systems. Where I go further is that a human language is vastly larger than just its formal syntax on a synchronic level -- consisting diachronically and developmentally, like a living organism, of four evolutionary brainmind rhythm

levels (kinesthetic, emotional and social/idiomatic as well as formal syntactic) with non-locality seeping in from the bottom, below the slowest rhythms of consciousness.

This of course allows other life forms into the Language game, though playing only at lower speeds of the game, restricted from our top one for lack of a fourth brainmind (our left cortical hemisphere) to act as a container for ultra-high-speed brainwave functioning, since no other land animal undergoes hemispheric lateralization. My form of Quantum Linguistics could also thus be called Biorelational Linguistics, after Rosen's use of relations and category theory (more on Rosen below).

If you want to develop Quantum Syntax, go ahead, though I'm not so sure that any syntactic schema which work logically and well in English will shed any useful light on eventing in Hilbert Space -- which is why your quantum syntax does not go immediately to the head of the class to become Quantum Linguistics, no matter how accurate it may be for your chosen quantum-syntactic problems that you've limited debate to!

[Alexander Patterson] The first challenge is in choosing the set of quantum tools that are appropriate to linguistics (complete deficit of study or inquiry in this area). The second challenge is in choosing the same experimental set of standard linguistics construct tools to which the chosen set of quantum tools can be logically applied (again complete deficit of study or inquiry in this area).

[moonhawk] These are important challenges you've set for yourself, and appropriate to your syntactic goals -- however inappropriate they may be when linguistics lacks both tools and concepts for dealing with, say, non-locality issues, such as rapport between language users.

The fact that there is a perceived deficit probably demonstrates my own, for one, profound lack of concern with these mechanical/syntactic interests, preferring more "exotic" consciousness issues such as non-locality and meaning, as do many or most on this list. You might ask THEM how many agree that non-locality and consciousness are mere metaphor.

And, if I were you I'd check out Ford's work before assuming you're plowing virgin ground with quantum grammar.

[Alexander Patterson] The third challenge is in being educated enough, or educating yourself enough as a linguist, to find a mathematical construction language which is capable of handling the success of the first and second challenges without drifting into la la land.

[moonhawk] I couldn't agree more about having a mathematical foundation, as long as it's appropriate to your goals. And I couldn't have said that a year ago, even though I knew it intellectually, before Brian Josephson and Stephen Gamboa-Eastman urged me to get Robert Rosen's *Life Itself*, as I so urge you.

In fact, this biological mathematician backs up my own experience that, for all the important stuff, you can throw away the syntax and work with the semantics alone; hence my lack of interest in your challenges, your approach, and your data below [snipped] -- though I certainly wish you well in your endeavors, which to me are equally la la land, to be honest.

However I also respect quantum grammar as necessary and complementary to my own approach, equally comprising this nascent field of quantum linguistics. But please don't barge in using Chomskyan dismissal tactics and try to take over by manufacturing consent around your syntactic endeavors, calling the rest "mere metaphor." (Chomsky acknowledged Wilhelm von Humboldt as his honorable ancestor for some ideas, dismissing the rest that he didn't like as "romantic.")

Guess what -- relativity and quantum physics, which Baron von Humboldt in the early 1800s could have certainly put to good use, was not then available to him, but is now for me, for instance, for following some of those Humboldtian notions that Chomsky dismissed as irrelevant (to his purely syntactic approach, note), now that we have notions such as relativity (Einsteinian/Whorfian notions of language), non-locality, and others with which to reexamine Humboldt's ideas.

For instance: Once "language" is defined in a Whorfian way as a language/culture complex, can a language be seen as a living entity? When an animate universe is assumed instead of an inanimate one (relativity of worldviews in languages), there is no question that language is animate and nonlocal, living inside each speaker and as well tied together in a larger field way -- which is exactly what Humboldt said about language being inside of us but also US inside of IT, except **fields** hadn't been scientifically discovered yet.

So my concern is with animate language, rather than studying the present-athand, inanimate syntactic bones of language (linguistic paleontology?), which is why Rosen's work appeals to me for my mathematical foundation the way I like Heidegger and Merleau-Ponty for my philosophical foundation, preferring investigations into the living ready-to-hand aspects of languaging. But hey -that's just me!;-).

[Alexander Patterson] Note to linguists: Any linguist who may read this article and who uses any of its contents or ideas without the

permission of its author (me), will be prosecuted for intellectual property violation and copyright breach. I had enough of that with my unpublished work at Berkeley.

[moonhawk] Good for you! That makes three of us, including my wife, ripped off by the exact same department and associated faculty. And I know there's plenty more. ;-(

warm regards, moonhawk

"I don't need a compass to tell me which way the wind shines!" -- Roy, Mystery Men