# **Issues in Quantitative Linguistics**

4

edited by

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Dedicated to Reinhard Köhler on the occasion of his 65<sup>th</sup> birthday

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## **Studies in Quantitative Linguistics**

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## The first steps

To learn quantitative linguistics means to collect the works written by Reinhard Köhler and read them thoroughly. Needless to say, one must already know what other (= normal) linguists know, i.e. definitions, classifications, rules, history, etc., but, if one ventures to take a step further, one necessarily bumps against the door of a world one wanted to avoid. It is surely not the infinite paradise but rather the hell in which Köhler, dressed as Lucifer, leads the innocent linguist through the labyrinth of new concepts, formulas, systems, synergetics, statistics, hypotheses, theories. The world of language begins to change its form and the linguist begins (very) slowly to see that there is more light in this world than outside. Köhler loses slowly his Luciferian shape and at once he seems to be the angel responsible for this world. He leads the linguist along ways that join the individual properties of language. One imagines that one is in phonology – very far from syntax - but the angel shows one that there is a very short way between them, and, what is more, one can express it by a formula. That means one need not walk the way; it is sufficient to think it.

Of course, this is rather an esoteric world that exists also in physics and biology, and there is nobody who could prohibit you from entering it (the only exception is the dean of your faculty or head of your department!), but fortunately there is an angel looking sharply at the dean (or head) and leading you into a world in which human language looks like a self-organized system. You may settle on a concept and the system shows you immediately all the links to other concepts. What is more, it brings you to concepts developed by the "Lucifer" himself. As a (pure) linguist, you never heard of them before.

If you succeed in abandoning this world, you will realize that, in front of the door, the same Lucifer stays and wishes you – smiling politely – good moral conscience and much success in repeating what you must teach the students in order to become an "expert" yourself. Linguistics is not about teaching a language but an immersion into worlds which are abstract and similar to the fifth (or higher) dimension of physics. At each step, you can see the smiling Lucifer who created it himself – perhaps only in order to irritate classical linguists who thought that they knew everything already.

But, if you want to stay in this world, you will soon see that you must learn a lot of mathematics, a lot of philosophy of science, forget grammatical rules and all degenerative drawing of trees, and ask the masked Lucifer for help. He will merely smile and, since he wants to retire this year, he will show you a monumental heap of paper and say: "Read all the papers and books in this heap. You can read them more quickly than I wrote them!"

Nevertheless, we hope that he will make the heap higher.

Gabriel Altmann