LETTER TO SPENCER-BROWN

William Bricken
December 1985

To: Professor G. Spencer-Brown

Subject: Laws of Form in Automated Deduction

Dear George,

We spoke for several hours on the phone in December 1983. At the time, you were interested in possible funding sources for your work. I felt quite unable to address those needs; my work with your mathematics was also unfunded.

Over the interim, I have managed to find half time support for the development of an automated deduction system using Laws of Form as the primary deductive technique. Basically, I have realized the material in Appendix 2 of the book within an expert system inference engine. I am enclosing my first paper on this technique.

We both recognize the tremendous potential of deduction based in distinction. As might be expected of a profoundly new idea, I encountered difficulty within the academic environment at Stanford conveying the theoretical import of your work. Basically, it is too general, and requires too many cross-disciplinary connections, to be palatable for the specialized academic mind. So, I chose to concretize your work in a practical computational form. This endeavor has been very successful, and those who have reviewed it are receptive.

My current focus is the implementation of a First Order Logic theorem prover. The propositional model you present is being combined with unification in a control structure that subsumes both functional and declarative programming. Of course, there is much work to be done, particularly in addressing the complexity of alternative formalisms.

I hope that you are entertained by the paper. When we spoke, you mentioned your notes on the connection of Laws of Form to several other domains (education, number theory, physics, ...). Whenever I discuss your work with others who have talked with you, they invariably offer some new insight. (Lou Kauffman taught me about Aintree's idemposition; Cliff Barney gave me the AUM Conference transcripts.) The point I am getting to is that much of your thinking is unaccessable through normal channels. Although I do not object to reconstruction from the void, I would deeply appreciate access to any sign-posts that you have created along the way. The alchemy I offer in return is to convert the base words into computational gold.

Thank you for providing the tools with which I clarify my thoughts.