NOT AT AAAI

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I submitted the paper, *Utilizing Boundary Mathematics for Deduction*, to
AAAI-87. Here are excerpts from the reviews.

Rating scale is 0 to 10, with 7 being average.

Reader 1: rating = 5

"The paper treats the straight forward (non-reentrant) part of Spencer-
Brown's propositional logic...I don't find the arguments for the practical
importance of this for AI very convincing... The relation between the
decision procedure presented here and Spencer-Brown's simplification
procedure for his primary arithmetic isn't indicated."

Reader 2: rating = 2

"None of the unique properties of boundary mathematics are used in this
system... I do not see any representational gain from this move. In
particular, the claims about reducing redundancy are simply wrong."

COMMENTS AFTER THE FACT

Well, it sort of feels like they didn't read it, or was it too succinct?

Both reader's seem to want to demonstrate their knowledge. It's surprising
that they would, considering they couldn't know much about the stuff other
than the paper they were reading. What pressure these poor guys must be
under. Judge and justify...

Number 1 obviously had heard of and maybe read Spencer-Brown, and he's right,
I should have said its the same decision procedure. Except I don't know what
decision procedure he's referring to. Couldn't be the procedure for the
arithmetic, cause that's a different domain; I don't think he meant
"algebraic simplification" cause that's too obvious. The only other one is
stepping into the arithmetic from the algebra, the bridge theorem, but then
the answer is that the paper had nothing to do with that, and one is not
usually held accountable for listing what one is not addressing.

Oh it *is* the primary arithmetic decision procedure he wants. As an analogy,
he's asking for the relation between how to do arithmetic and how to do
algebra, between turtle geometry in logo and analytic geometry in APL,

between playing with blocks and reading books, between self and others. Yes, the straight forward part.

Number 2 provides a humorous catch-22. Losp doesn't use boundary mathematics. He knows boundary math well enough to judge, I guess, because the paper taught him so well. He is knowledgeable about himself, since he knows that he sees no representational gains. Since they're not there, its consistent to label their description as wrong. The saving grace in this is, of course, that they are *simply* wrong. At least I erred in the right direction.

OBSERVATIONS

Both of these guys are male.

There is no creativity crisis in AI.

Ideas need a niche in order to grow. The babies need a place to grow that's secure and nourishing. The big kids on the block just got new baseball uniforms, and they don't want to share their toys. Besides, I just got a new red tricycle.

We are all experts about truth.

Outside of our area of expertise, each of us is bluffing.

EMOTIONAL HONESTY

Sure it hurts

QUICKLY FOLLOWING RATIONALIZATIONS

But, it doesn't work like in the movies. Its idealistic to expect to walk right in and be thanked. The future must always wait in line for the past to be done. Ideas spread by contact. If it were that easy, it wouldn't be as much fun. Ah that's done, let's get on with the build.

BIG LESSON LEARNED

Seek understanding with those who indicate they seek to understand. That is, hang out with friends.

william "3.5 below the average"

A Word of Advice

From a friend:

"Unfortunately, I don't think he will go for either of the papers you gave me. As I said last week, he's a "hard science" man: first the proof, then the pudding. The way you've written these papers, there is no "proof", no point being argued or demonstrated. Well, that's not precisely true. Maybe it's more accurate to say that you don't hit the reader between the eyes with your improvements on previous work. While you say that LoF/Losp has advantages, you do not back up those claims with proofs, demonstrations or measurable quantities. Elegance alone is not enough to convince an AI audience. That's why you've gotten those "so what"s ... they're looking for a refutation as well as a conjecture. Much as I hate to push people into competition, it's the nature of technical literature that:

1. you have to address a problem (= spell out a success criterion);
2. you have to prove your idea to be a winner,
3. you have to turn everyone else into a loser,
4. you have to make your victory obvious to even the most stupid and stubborn reader.

There are any number of success criteria you could set up for Losp -- it's a very promising idea, in my opinion. But you have to follow through and show a clear victory. Once you have done that, its elegance is so obvious as to need no defense.

Here's a few candidate success criteria I picked up while reading your papers. I suggest you choose one or more of these as a way to demonstrate your victory:

- superior capability
    - eliminating the logic/function boundaries
    - constraint inversion (eg crypt arithmetic)
    - conditional proofs (explicating missing assumptions)
    - automating case analysis
    - reasoning with inconsistency (square root of NOT)
- superior performance
    - inferential simplicity due to nonredundance (compare numbers of proof steps)
    - speed made possible by one-form local parallelism (simulated or by analyzing computational complexity)

Such techniques as boundary logic and nonrepresentation can only be the means to a more short-sighted end; and the metaphysics of the primacy of distinction has no place at all in AI except as reflective comments well after you're famous."