THE CAMBRIAN

It doesn't add up.

BY GEORGE ZEBROWSKI

We were sure that Hinkle had to be deluded when he first told us that he had been talking to horseshoe crabs.

"They are intelligent," he insisted, "a variation of the oldest on our planet. They think about a lot of things."

He showed me equations.

"You did these yourselves," I said. "Come on, admit it."

Physics was my game, but his maths gave me a strange feeling, familiar and unfamiliar at the same time.

"Where did you get these?" I asked.

"From the Cambrians."

There weren't any equations like this that I had ever seen.

"If it's a delusion," I told Hinkle, "then you need to keep at it," half joking.

"What do you mean?"

"You deserve the credit, of course," I said.

"But I have no idea of what they mean, or what they're about," Hinkle said.

"You must know," I said, "or you couldn't have written them."

"I only took them down," he insisted.

"Why are you lying?"

"You're my friend. Why should I lie to you?"

"Who are you protecting?"

"No one. The crabs talk to me. Here, look."

The equations all led to one unified statement about the Universe, but I noted that there seemed to be an incompleteness about the final statement, and wondered what crank book he had found them in.

"What about that?" I asked him.

"Search me," he said. "I'm just a conveyor."

"So you say," I said, "but this claim is so comprehensive and suggestive... yet incomplete."

"Remember, I am a palaeobiologist first."

I nodded and said: "Stop kidding me."

"Well, I can tell you," Hinkle said as he took a deep breath, "that I suspect it's supposed to be incomplete, but that it says all that can be said about our Universe. Who was it that said that science attempts to say something about our Universe, but will never say everything that can be said?"

"Bohr, maybe Feynman," I said. "Doesn't matter. But do you have

any idea of the assertions you've written down?"

"You tell me," Hinkle said.

"Either physics can be completed, or it can never have an end, and this final equation of yours asserts a *perpetuum mobile*."

"It's news to me. Enzymes interest me, especially as they affect intelligence."

I gave him a hostile glare, the first in our long friendship, and it seemed to shake him.

"Who's behind all this? I demanded.

"What do you mean?" Hinkle asked, looking like a deer in headlights.

"I get it," I said. "More Gödel incompleteness! Dyson's claim that the theorem is a cathedral of implications, that he would feel sorry for physics if it could be ended, a cultural disaster, leaving us with technology and a manipulation of the Universe through instrumentalities, but nothing more to learn, ever. I'm tired of Gödel and his nothing proof."

"I wouldn't know," Hinkle said, "but I never thought any such thing. These critters are the oldest thinkers on Earth, and they don't wish us any harm."

"But you are doing harm, with these pseudo equations!" I cried. "Don't you know that you can't just claim such things?"

"Then leave me out of it," Hinkle said, "as all this doesn't mean anything, as you say."

"Oh, you're sly," I said. "You know damn well that we have enough dummies who may take it seriously. You're sly, all right."

"But if they're nothing at all, then you have nothing to fear."

I looked at my friend and said: "I'll tell you the truth. You fell in love with these crabs, and that seemed to help you come up with all this. That's all there is to it. You can't take it seriously. You obviously know more maths than I thought."

"But I don't," Hinkle said. "One way or another, I don't know."

I looked at him and said: "Show me how it happens, when you write down what they... give you?"

"Sure, look here, I feel one coming in."

I watched him scribble on the back of an envelope, as fluidly as any good mathematician.

I looked at the result and said: "It's a literate mathematical statement, but it has to be a guess."

More equations came, after which he seemed worn out. I packed them in my briefcase and left him sitting there with his eyes closed like an exhausted lover.

Physics continued completing itself. As usual, open ends had to be irrational avenues; infinities had to be renormalized, limited, outlawed.

Yet in his own way, Hinkle became the greatest physicist of his generation, despite a vast suspicion that he had unknown collaborators feeding him variations on anomalous Higgs boson regimes, which he described and applied without the Large Hadron Collider's data.

Patents are granted to him, and his ideas lead to inventions that work but are not explained. "Just luck," many say. "Quantum engineering works, it predicts and needs no explanations, only descriptions."

The last time I went to see him he told me that human and crab brains might have merged. I told him that was an insane idea. "Well, of course, maybe it didn't happen," he said, "but it should have."

He's a fraud of some kind, but we don't know how he does it.

He's a sight on campus, walking a lot, even at his age. People say he looks younger than some years ago. He strides around in a long coat, hunched forward a bit as if there was something on his back. ■

George Zebrowski is an award-winning novelist, story writer, essayist, editor and lecturer. His latest novel is *Empties* (Golden Gryphon Press). *Sentinels In Honor of Arthur C. Clarke*, with Gregory Benford (Hadley Rille Books), is his new anthology.

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