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Gooney Ducks and Naked Physicists

Part XX They Call Me Dr. Bug!

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Abstract: An allegory of modern science.

Part XX

Ultraviolet catastrophe!

Expanding universe? Quantum physics? Relativity? Evolution? *Chariots of the Gods?*
(Pyramids, flying saucers, and Sasquatch rides the Loch Ness Monster?)

Sure, I know what sensational theory is, but reality?

I remember a story:

*Two men (both named Albert) boarded a train in Scotland
(one carrying an interferometer, the other a stone).*

*Entering a compartment where two other gentleman (Max and Maxwell) were already
seated, the first Albert turned and said, "What's in that black box on the luggage rack?"*

"A MacGuffin," one of the seated gentleman replied.

"What does it do?"

"It catches lions on the Scottish Highlands."

"But there are no lions on the Scottish Highlands," the second Albert protested.

"Oh? Then that's no MacGuffin."

Yo, Mr. Hitchcock, what is reality? What's real and what isn't, and how do I know?

It just occurred to me: What if I weren't "*for real*"?

What if I were just a character in a paperback novel—just another in a long line of imaginary, hard-boiled private detectives, sitting in my imaginary seedy office, half-listening to a Mariners' game, daydreaming about my beautiful, intelligent secretary Eva bringing me a piece of chocolate cake? (A classic thriller starring Cary Grant and Eva Marie Saint...)

Huh...even as a "*dream boy in a dream chair*," I would still be "sitting" in my own mathematical reality of time and space.

Yeah, even as a fictional character—even if I didn't really exist—math would exist for me!

The reality of my non-reality would still be math!

I guess there's no escaping it!

Truth, lies, science, fiction, proof, and theory? A "constant" of any "reality" seems to be math!

So what is math? Our ultimate reality? But then, what's the reality of math?

I recall once,

as I sat daydreaming in the dappled light of a warm summer's day, a honey bee busily buzzed around me and landed on the ground near my feet. As I watched, the bee walked over to a large, dead insect and circled it several times. What in the world was the bee up to? It seemed to be *measuring* the "carcass." To my amazement, the bee proceeded to use its jaws to carefully cut the dead insect into three equal parts. Then, after straddling and picking up one of the parts, with a mighty, herculean effort, it laboriously lifted off with its cargo, like a B-17 ("Bee-17"?), and flew away in a direct "beeline" of travel, slowly gaining altitude. Soon after, the bee returned along the same line of travel, landed, picked up the second insect part, and flew away again. After that, it came back and got the third.

The bee reminded me of a "flying" teamster: carefully calculating maximum load capacity, vector heading, ETA, and travel coordinates for its long-distance haul. The thought crossed my mind that this tiny creature must have some sort of internal language (system) for interpreting its existence in time and space—some form of mathematical understanding!

Wow! Tiny flying mathematicians with their own "Bee-tesian" coordinate system and "Bee-thagorean" theorem?

Now that I think about it, obviously bees possess an understanding of geometry and number. I can see this expressed in their beautiful hexagonal honeycombs. But I've never thought of bees having an actual *insect* language and lexicon of math.

Hmm, a "Type-Bee" mathematics? "Bee-ometry"?

I took a quick look on Wikipedia. Sure enough:

Dr. Karl von Frisch discovered that honey bees navigate and *communicate!*

They indicate the range and direction of food to other workers with a waggle dance!

Gee, Freddie! Communicate math with dancing? Now you're talking my language!

What fun! I'll have to look at everything a whole new way! Talk about significant figures!

What does one bee say to another at a bee party? What was Elvis really trying to tell us?

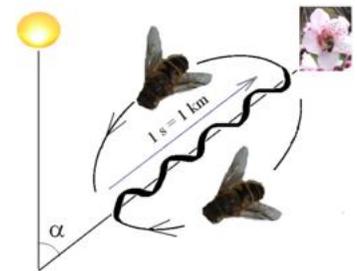
Sure gives new meaning to "Square" and "Round" dancing! I'll have to add to my repertoire!

I did a two-step, quick-step and a bossa nova

A little Victor Sylvester and a Rudy Valentino...Hand me down my tuxedo?

I can't wait to give Eva a "buzz" and give it a whirl! The Bee Wiggle? The Bumble Rumbo?

Dancing with Bees? I can just see a bunch of physicists trying out the new math!



Dateline NBC

The Mathematical and Scientific World Is Abuzz

Q. What did the male bee say to the female bee?

A. "Honey, I just love your beehive hairdo! You're the bee's knees!"

Yeah, I can imagine bees communicating (and may "bee" even whispering "sweet" nothings to each other). But exchanging mathematical concepts and data with their buzzing compadres—bees actually doing math? What a wild concept!

Math on Planet Earth will never "bee" the same! But leaving corny jokes "bee"hind, looks like Seattle now has more to offer the world than grunge bands (Mudhoney and Pearl Jam), the Mariners, and Chihuly glass! Seattle science—pioneers in the field of "bug-ometry"! Imagine, bees with natural, mathematical understanding and intelligence. Insects with their own language of math?

Wow! Relativity, calculus, and algebra seem kind of boring now!

What a shock, Spock! To think we're not the only form of intelligence in the universe!

Man's not the only mathematician; our math's not the only game in town!

Math not restricted to us primates? Well, I'll be, Aunt "Bee"!

Bugs with intelligence? Reminds me of "Johnnie" Rico in Heinlein's *Starship Troopers*:

Come on, you apes! You wanta live forever?

—Unknown platoon sergeant, 1918

I always get the shakes before a drop. I've had the injections, of course, and the hypnotic preparation, and it stands to reason that I can't really be afraid. The ship's psychiatrist has checked my brain waves and asked me silly questions while I was asleep and he tells me that it isn't fear, it isn't anything important—it's just like the trembling of an eager race horse in the starting gate.

I couldn't say about that; I've never been a race horse.

But the fact is: I'm scared silly, every time...

Arachnids—those Bugs make me queasy.

Reality check?

Now that I realize insects are mathematically intelligent, sure puts a new spin on evolution!

Does the size of the brain really matter? Good thing they're not bigger than we are!