

Hylozoic universe suggests new future for mathematical game theory

Lee Bloomquist  
wexe design

"What is fundamental?"

Thales— said by many to be our first philosopher and astronomer— concluded that reality exists through an underlying fluid. However, in those days there were no superconducting fluids, and no quantum, relativistic or string theoretic field theories in terms of which to think. Thales simply thought in terms of water.

Close enough. Today that would be the fluid dynamics of fields.

However, Thales also thought in terms of "agency" as we would term it today in behavioral economics, experimental and mathematical game theory.

Thales, in this abstracted translation, says: "Everything has a self."

Aristotle and subsequent authors translated instead to "gods" or "souls."

But an abstraction over both "gods" and "souls" would be the translation "self."

Now both gods have selves and souls have selves!

Specifically, every soul has a self. That is the self in which the soul exists.

And clearly, every god has a self.

Thales abstracted from the agency ascribed through the early gods and goddesses, and instead said that everything has a soul, which today generalizes to everything has a self.

This move explains the entire universe in terms of mathematical game theory. Where there is a new language waiting for us. For example, the game comes into being because the self hungers to play it.

What we know about this so far:

Thales effectively said that everything has a self.

Since mathematical game theory is successful in the laboratory at modeling the behavior of subjects in the laboratory, mathematical game theory in that sense models the behavior of selves.

Next, a mathematical equation for "the self":

$\text{self} = (\text{self})$

It's a non-wellfounded set.

And then for the case of human beings, we can model the emergence of thought:

self = (thinking, self)

It's a "mathematical stream," a "co-algebra" in fact.

A final note about the emergence of thought:

Recall Hellen Keller's description of how her stream of thinking began in the well-house with her teacher.

<https://www.youtube.com/watch?v=IUV65sV8nu0>