

# Squirrel In Hell

2017-07-07

## Epistemic Laws of Motion

*Standard Disclaimer #14074: I speak to those who know how to listen. Slightly interesting ideas are best transferred under the guise of practicality, boredom, and clear-headedness. But what about very interesting ideas? These might well be best told under the guise of chaos, demonic possession, and madness.*

**Note: in retrospect, this post is too obscure to get useful ideas out of it. Consider it unendorsed.**

### 1st Epistemic Law of Motion

Every person persists in their state of doing nothing or executing always the same strategy **S**, unless they are compelled to change that state by external epistemic pressure **P**.

Assuming constant non-zero psychological resistance, the first law can be written as:

$$\sum P = 0 \Leftrightarrow dS / dt = 0$$

### 2nd Epistemic Law of Motion

Every change of epistemic pressure  $\Delta P$  is equal to the change in a person's strategies  $\Delta S$  times their psychological resistance **R**.

$$\Delta S = \Delta P / R$$

### 3rd Epistemic Law of Motion

For every epistemic pressure, there is an equal and opposite psychological defense mechanism.

Everything clear? Great! Now let's do some calculations and practice on a real-world problem.

### Example problem

A 70-year-old Catholic becomes a Jehovah's Witness, actively working in the movement. Estimate how likely they are to change their mind about this decision.

Solution:

We know the change of strategy from the problem statement:

$$dS = \text{medium}$$

Also from the age of 70 years, we can estimate psychological resistance:

$$R = \text{high}$$

Then from the 2nd Law we calculate epistemic pressure:

$$P = R * \Delta S = \text{high} * \text{medium} = \text{high}$$

Finally, we use the 3rd law again to get the answer: high epistemic pressure results in strong psychological defenses. Therefore it is unlikely that this person will change their mind again.

#### Blog Archive

January 2018 (3)  
December 2017 (3)  
November 2017 (1)  
October 2017 (2)  
September 2017 (1)  
August 2017 (2)  
July 2017 (1)  
May 2017 (2)  
April 2017 (1)  
March 2017 (2)  
January 2017 (2)  
November 2016 (1)  
October 2016 (1)  
September 2016 (2)  
August 2016 (1)  
April 2016 (1)  
March 2016 (1)

#### More by SquirrelInHell

- [AI Safety Comics](#)
- [Android Apps](#)
- [Be Well Tuned](#)
- [Rationality Updates](#)

No comments:

Post a Comment

Newer Post

Home

Older Post

Subscribe to: [Post Comments \(Atom\)](#)

Simple theme. Powered by [Blogger](#).