

**From:** "Nowak, Martin" [REDACTED]  
**To:** jeffrey E. <[jeevacation@gmail.com](mailto:jeevacation@gmail.com)>, Lawrence Krauss <[REDACTED]>  
**Subject:** internal / external  
**Date:** Sat, 16 May 2015 11:17:29 +0000

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i built a system with two types of payoff matrices - internal (perceived) and external ("real")  
individuals are on a social network  
they are doing "best response dynamics" using their internal matrix  
occasionally they update their internal matrix by comparing others using their accumulated external payoff  
i think this is the first time that best response dynamics can lead to cooperation based on spatial selection

On May 15, 2015, at 5:05 PM, Lawrence Krauss [REDACTED] wrote:

just to provoke some input from Martin.. and it may make a face to face meeting worthwhile... my question is, if one accepts that there are two (inside vs outside), conflicting forces at work.. the game theory issue then becomes how to couple these and derive optimal solutions..

LMK

On May 14, 2015, at 9:57 AM, Lawrence Krauss [REDACTED] wrote:

hmmm.. have to think about this.. it is long accepted that the god myth satisfies some long standing internal need humans have for either defense against death or need for purpose.. no doubt actions governed by satisfying that pleasure center... the key question is where inside and outside intersect and cannot both be satisfied together.. that is where game theory is relevant I think.. how to compromise on satisfying hopes, and satisfying reality when trying to outsmart a charging lion..

LMK

On May 13, 2015, at 3:47 PM, jeffrey E. <[jeevacation@gmail.com](mailto:jeevacation@gmail.com)> wrote:

inner domain, goals are self created. masturbatory fantasies. for example. rewards in sub domains, social physical emotional, , some hard wired food, temp. etc. a continuum of hard to self imagined. . adapted for the outer domain, I environment, .

outer domain subject to laws of physics . inner domain , biologically yes, but ghosts, beliefs self deception and delusion, and most importantly hope, all actualized.

It makes little sense to apply an evidenced based system in the inner domain, it is comprised of a non cumulative li grouping, . no symmetry for example. however the image of your fantasy girl conjured up

while you pleasure yourself , is a real to the inner self as the cigarette you smoke afterwards is to the outer domain.

Inner rewards would have been subject to natural selection, so that random killing in the inner world would unlikely be adaptive. acts of inner revenge however could blow off steam and save outer world consequences.

religion acts as one of many proposed belief systems to help construct an inner life. where the unpowerful are effective. it makes as little sense for it to be a logic system operating in the outer domain as little as a science based view on the evidence of my fantasy girl. you should find some highly correlated inner and outer rewards but as many uncorrelated. depression might mean ignoring the outside altogether, , retreating into an inner self in order not to do harm.

the inner life should be normally distributed over subdomains as well as a homogenous population . so that some in the group receive social pleasure, some only physical. etc.

In the game theory analogy, the reserves both in the inner and outer domain play a substantial role. . there are many experiments that show that a rational being modulates his reserves so that they last a long time. only in certain circumstances can you access these reserves on purpose. jet pilots told to hold their hands in ice water , until they can't take it pull out in under 150 seconds. however if you tell them to last for 180 to make the grade 80 percent are capable. . hope meaning purpose. all self created fictions that are selected for. . there are outward signs , confidence , smiling , that create an outer group;

religion is a logic system that intersects that of science .ie being kind, has benefits in outer as well as inner domains - as goals are aligned, believing that mohammed rode to heaven on a horse. is ok, if it satiates the inner self. reduces blood pressure, , but unable to withstand the rigor of the outer mathematics. and is dangerous but so is that blonde, girl that always does as she is asked in your fantasy, . uh oh, you actually married her.

On Wed, May 13, 2015 at 3:26 PM, Lawrence Krauss [REDACTED] wrote:

will call in a bit.. doing your letter now and other things I should have done yesterday..

p.s. here is my acceptance speech I wrote for the AHA.. you may hate it.. but I was proud of it. Martin's suggestion may lead to another path.

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On May 13, 2015, at 12:05 PM, jeffrey E. <[jeevacation@gmail.com](mailto:jeevacation@gmail.com)> wrote:

[REDACTED] its really really good

On Wed, May 13, 2015 at 2:45 PM, Lawrence Krauss <[REDACTED]> wrote:  
no worries.. my problem.. not yours..

doing your letter today.

today is first day I feel ok.. we need to talk again about Martin's idea.. my mind was not working the other day...

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On May 13, 2015, at 10:55 AM, jeffrey E. <[jeevacation@gmail.com](mailto:jeevacation@gmail.com)> wrote:

i had a strong view back when. now unsure

On Wed, May 13, 2015 at 1:50 PM, Lawrence Krauss <[REDACTED]> wrote:  
quick question.. we have been lazy and left money in AUD. in the last 2 days it has shot up 4 cents.. should we transfer the money or expect it to rise further? Any ideas?

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