

**From:** Jeffrey Epstein <jeevacation@gmail.com>  
**To:** Corina Tarnita <[REDACTED]>  
**Subject:** Re:  
**Date:** Sat, 21 Nov 2009 10:20:57 +0000

---

we should look at signal to noise.. for example if the channel was noisy it would make sense to make a multiple copy of the agent. it could simply be repetition. then an error checking bit, then an encoding , I think the great mystery now is that Socrates appears to have been wrong. His maxim of " Know thyself " , might let predators also know you , and destroy or hijack you with less effort.

On Sat, Nov 21, 2009 at 2:03 AM, Corina Tarnita <[REDACTED]> wrote:

hi jeffrey, i don't know if martin already told you about this but here's something that might validate your DNA hypothesis: if you play repeated games with memory 1 (you remember the opponent's last move), a winning strategy is Tit-For-Tat. you can think of such strategies as finite state automata. if you make an evolutionary process where these automata can evolve and grow as large as they want (hence producing more and more sophisticated strategies), and if you look for winners you will see that often TFT is still a winning strategy.

but what changes is that the newer TFTs are encoded by longer and longer automata (same strategy, just given by more complicated automata). but more interestingly, i think it takes much longer to invade a longer TFT than a short one. this would mean that it makes sense to have more junk there -- it certainly seems inefficient to produce an automaton with 50 states that encodes a strategy which could be given with 2 states. but it's not that stupid; all that "junk" seems to protect against invasion. we're investigating this now. thought you might like to know.

hope you're well,

corina

--  
\*\*\*\*\*  
The information contained in this communication is confidential, may be attorney-client privileged, may constitute inside information, and is intended only for the use of the addressee. It is the property of Jeffrey Epstein  
Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by return e-mail or by e-mail to [jeevacation@gmail.com](mailto:jeevacation@gmail.com), and destroy this communication and all copies thereof, including all attachments.