Thanks Jeffrey. Jeffrey was talking about you in the context of Bounded =ationality which relates to an ongoing conversation I've been having =ith him. I was digging through old email and I found the following.

Now that I'm at MIT, I'd love to reconnect and see how your thoughts =ave evolved in the last decade and share some of my thoughts.

- Joi

On Mar 23, 2004, at 9:53 PM, ████████████ wrote:

> Dear Joi,
>   Unsurprisingly, it has taken me a long time to try to construct a
> more precise model of tradeoffs between money, energy, information,
> love, etc. (Unfortunately, I have lots of work to do for my day job.)
> Here you go, though. Much of this will be impressionistic. I'll flag
> with a * the things that are mathematically precise or can be made so
> (I won't put in any math, though!).
>
> I would like to make more precise the part of our conversation that
> had to do with narrative. You made the point that classical economics
> is based on a rather bald and unconvincing narrative (to paraphrase
> Bertie Wooster) that the only thing that is good is money, and the
> only thing better than money is more money.
> Only a very few obsessed people operate with this principle as the
> =ole basis for their narrative, however. Most folks construct a
> narrative =n which to base their behavior out of a variety of
> different principles =nd `sub-narratives.' (Mind you, I'm a little
> uncomfortable with the word `narrative' itself: I may have mentioned
> to you during our =onversation that I was negatively impressed with a
> remark that Edward Said once =ade to the effect that `The problem of
> the Palestinian people is that they don't have a narrative.' Perhaps
> more to the point, they don't have food or land or schools.)
>   But the stories we tell ourselves do form the basis for the decisions
> we make: this is where classical economists fall down in thinking that
> decisions are made with only money in mind. And in =act, if we look
> upon narratives as the basis for the thought process behind the making
> decisions, then there is quite a lot of mathematically precise stuff
> that can be said about them.
>
>   Suppose that someone (a person, a dog, a computer) is faced with a
> yes-no question: Do I buy this suit? Do I pee on the rug?

> Do I crash? (I'll let you decide who asks which question.) To make
> any such decision requires weighing a number of factors, or =nputs, in
> the process of making the final decision. For example, I need a =uit,
> but I don't have much money this month; I like dark suits and this is
> =n the light side; on the other hand, the geometric pattern is great;
> =uch a suit is unlikely to show up again. Or: I really need to pee,
> but ='ll get in big trouble if I do it on the rug. Or: I am
> overwhelmed with conflicting requirements and many tasks to be
> performed =imultaneously; is there a way I can find to schedule them, or not?
>   One can think of the reasoning process that goes into attempting to
> make a decision as the process of constructing a reasonable narrative
> whose conclusion is the result of the decision.
> (E.g., I can't make it outside in time, so the rug it is.) From the
> perspective of the person making the decision, the =onclusion to the
> narrative (the yes or no) is not determined until the narrative itself
> has been constructed. (From the perspective of someone else,
> of course, the narrative may have a foregone conclusion. That damn =og:
> it always leaves it until too late. Stupid computer! Seth is
> =ncapable of buying a suit.)
>   This feature --- the being that makes a decision can not in =eneral
> know the answer beforehand --- is a reflection of a mathematical fact:
> * no physical system, whether human, computer, or dog, can model its
> =wn full behavior any faster than the behavior itself. One can
> construct fragmentary, incomplete models of oneself that capture some
> aspect of one's behavior. But to construct a full model of oneself
> requires at least as many physical resources (atoms, energy, time) as one =ossesses.
> In other words, the only complete model one can make of oneself is
> oneself itself.
>   This self-referential conclusion is the basis for a number of famous
> mathematical theorems, including Goedel's incompleteness theorem and
> the halting problem. But its primary expression in everyday life is
> the undecidability of decisions before they are made.
>   What does this have to do with the existence of conflicting
> narratives? Well, one of the main reasons that a classical economist
> makes a highly oversimplified model of human behavior is to render
> that behavior predictable within the model. Once one takes into
> =ccount love, religion, a sense of duty, sheer orneriness, and the
> rest of the sub-narratives and features of human existence out of
> which we construct our behavior and which form the basis for our
> decisions, then not only can we not predict what we're going to do, we
> can predict hardly any human behavior at all.
>   Indeed, I think that it can probably be established =athematically
> that *any theory that is sufficiently simple to allow the easy
> =rediction of human (or animal, or computer) behavior, is too simple
> to be =redict that behavior correctly; and *any theory that allows the
> correct prediction of behavior is sufficiently complex that its
> predictions cannot be evaluated in a closed form. This is basically a
> consequence of Goedel's theorem: mathematical theories have a
> threshold of =omplexity; once you're above the threshold, the theory
> contains statements that =re true but cannot be proved to be true,
> statements that are false but cannot be proved to be false, and
> statements that can be taken equally to be true or false, with no proof either way.

2

>   In the case of human behavior, this intrinsic undecidability arises
> from the construction of narratives out of a variety of =ifferent
> subnarratives and inputs; many possible self-consistent narratives can
> be constructed from what one knows and what one believes. But these
> different narratives, though each internally self-consistent, need not
> be consistent with each other. Indeed, the different possible
> narratives thus constructed can wildly contradict eachother and lead
> to radically different conclusions.
>
> OK, that's probably enough abuse of mathematics in the service or
> disservice of social observation for today. I hope that you are doing
> well and look forward to having lunch again one of these days.
>
> Yours,
>   Seth
>
On Jan 3, 2014, at 02:50 , Jeffrey Epstein <jeevacation@gmail.com> =rote:

> seth ,joi, i think you two will like each other
>
> --
> **
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> seth ,

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Please use my alternative address, ji@media.mit.edu to avoid email auto =esponder