

The Oil Drum

Discussions about Energy and Our Future

Enter the Elephant

Posted by [nate hagens](#) on November 15, 2009 - 8:45am in [The Oil Drum: Campfire](#)

In [The Happiness Hypothesis](#), psychology professor Jonathan Haidt compares human brain/behavior to a man riding an elephant. There exists a complex choreography between our newer rational cortex (the 'man'), and our older, more primitive brain structures (the 'elephant'). His point was that our brains can accomplish amazing things when we mesh our analytical abilities with our baser emotions and impulses, but that quite often the 'elephant' (our limbic and reptilian cores) unwittingly assert their dominance, and in the process override any rational, reasoned intentions. In aggregate we are a society that has become both habituated to and confused by 'more facts'. After writing about, thinking about, and interacting with others about the challenges society faces with respect to resource depletion, I am becoming convinced that confronting the 'man' with facts, although necessary to better understand our predicament, will be almost completely ineffectual when it comes to altering our course.



Below the fold I posit that before any meaningful mitigation towards energy, environmental and social challenges occurs, facts will become secondary and accessing raw emotions will be required for change.

In effect, exit the man, enter the elephant.



After restarting from scratch several times in the last 6 years, my brain has arrived at a place where I have fewer questions concerning the opportunities and constraints with respect to our situation. There is still a vast amount that we don't know - but the chasms between our energy trajectory, our insolvent financial system and our global environmental source/sink issues are wide enough that a reasonably well-read person unburdened by too much cognitive dissonance should be able to recognize the unfolding broader trend - that limits to growth are manifesting, now. Over the past generation, a growth imperative spawned a debt imperative which has gone hyperbolic when not buttressed by incrementally high energy gain. Today, the global scale of financial leverage relative to achievable quality adjusted BTU flow rates going forward suggests significant changes to our per capita throughput, or even to capita itself. However, many behavioral paths still lie open, the more likely ones the less promising, the less likely more so.

Most of my social circle is reasonably fluent in the wide boundary constraints that we now face. It is less often that I get into discussions from relative newbies on these topics. Which is why a conversation I had this week with my Aunt offered me a new insight. My aunt is a middle class, middle western, god-fearing, bright and well intentioned retired schoolteacher who forwarded me an email thread boasting about the magnitude of the Bakken Shale oil resource. Below is a brief reconstruction of our conversation:

Auntie F: Hi Nathan. I hope you are doing well in your studies. I was forwarded a report yesterday from Forbes claiming there were 500 billion barrels of oil in North Dakota and if we only allow companies to access it that we can be completely independent of foreign oil for generations. Have you seen this report? Apparently it was from government geologists and Forbes magazine obtained access to it.

NH: Aunt F, These are very complicated issues. Many analysts in the natural resources community conflate resources (how much is in the ground) with reserves (how much we can pull out). The disparity in opinions and understanding on important topics such as this, even amongst intelligent people, is extreme.

Auntie F: Well if all that oil is there why can't we pull it out? Why is it so complicated? Should be pretty black and white, right? The oil is either there or it's not.

NH: The oil might be there. But just like you have gold in your backyard, the amount of energy and natural resources required to get the gold flecks per ton of soil into a concentrated amount would cost more than the ultimate ounce or two of gold would be worth. Same with the diffuse hydrocarbons in the Bakken Shale. My wall st analyst friends tell me we might get 300 million barrels out eventually - MAYBE 500 million - which is alot, and might be very profitable for some companies, but is about 4 days of world supply. A drop in the proverbial ocean.

Auntie F: You mean that these government reports are wrong and we really can't be energy independent?

NH: Basically yes. We could be energy independent but only if we dramatically tightened our belts and relied more on solar flows - but by tighten our belts I mean down to 1/2 of our current consumption levels in the near term and 1/5 to 1/4 in the longer term.

Auntie F: I am so sick of all the garbage out there on any subject! I got an email recently telling me to contact all the seniors I know to vote Republican since the Democrats in Congress denied them their social security increase. How dumb do they think we all are!? I have to believe that Forbes knows the truth, yet he puts out skewed info to further whatever cause he is working for--and I just hate that! Our country is being weakened by people believing so much false information, or it seems that way to me. I'm not sure but I sure as hell am frustrated! Your uncle and I thought of you right away when we heard about the Dakota excitement--somehow it didn't jive with us that America could so easily become home free in the oil department. Thanks for the clarification. See you at Thanksgiving.

NH: OK. Hope so.

Whether its Peak Oil is passed/Peak Oil is 2030+, or climate change is anthropogenic and urgent/climate change is largely naturally forced, or the US and OECD financial systems are insolvent/the economic recovery is in full rebound; the disparity of [beliefs](#) on all things of consequence increasingly is heading towards the poles of fundamentalism, denial and dissonance. However, my aunt gave me a hint of what is starting to happen, and probably what will need to happen before we diverge from a business-as-usual path. She showed the beginnings of anger. Sure - it was tempered by politeness and masked by unawareness of our true situation that only 2 generations of energy/\$ seignorage subsidies can engender, but it was there just the same.

The same night I spoke with her (Wednesday), I gave a presentation to Leadership Wisconsin, a group of civic leaders appointed to improve and empower local communities. I find speaking to such a group a difficult tightrope act to negotiate - my impulse to be entertaining and benign wars with my need to maintain integrity and illustrate how urgent and messed up things are (a similar tightrope I tiptoe as editor here- the deeper I understand what's going on, the fewer people I can connect with). For many at this talk, I'm sure my speech was an unexpected dash upon the rocks. But some came up to me afterwards and thanked me for my frankness. We got to talking later that night and one woman who has been active in her Wisconsin community working on sustainability expressed similar emotions to my aunt, though from a different perspective. She claimed that she has understood our resource/population/environmental problems for some time, but eventually got frustrated and gave up talking about them to friends and neighbors because there was nothing that *one or a few* could do. Increasingly I hear this from people that get it - they are *willing* to do something, perhaps even out of the box and risky, in order to effect change - they just don't know what such a thing is. More analysis and better presentations just aren't strong enough to battle the momentum of entrenched popular dissonance.

JUST ONE MORE FACT.....

There are 2 thresholds occurring in resource depletion space. 1)the shifting but low odds on

steering the societal Titanic (turbo-capitalism) away from the iceberg (energy decline) and 2) what individuals are doing to increase their own odds of success of navigating the coming transition. Progress on one is probably uncorrelated to progress on the other.

Sometimes I think I am on the verge of really understanding not only the details of our global situation, but which paths are still open to humanity, and which are dead ends. Sure, I know there is a gargantuan amount of unknown knowledge out there (what we don't know we don't know), but it seems like if I could just get a little bit more info and synthesis, that I could convey such to others and the tumblers of the 'solution' lock combination could be made clear. A concise well written expose in the major newspapers etc. and people would start to change their behavior in the significant magnitude that will be needed.

I have come to see this as delusional thinking. As I wrote about in ['Whither TheOil Drum?'](#), I suspect the analyst community (to which I belong), are largely puzzle solvers. The unexpected reward from finding new empirical connections and lateral thinking tricks our dopamine superhighway into thinking we are effecting change, when in reality the results are akin to an arcade game. We rationalize said situation by hoping/assuming that others will advance our analysis and effect the appropriate policy steps that logically follow. I have come to believe this is not reality. The reality is people look at these graphs and analyses a) because they are interesting in the same way watching a scary movie with buttered popcorn is interesting and b) they want to improve their own situation (by investing in oil future, or gold, etc.).

What makes paradigms change? There is a kind of recipe. First, things need to be bad in relation to how they were. Relative not absolute. (If our GDP and consumption got cut in half we would still be richer than kings and queens of a few generations ago, yet the psychological withdrawal for most of such a trajectory would be devastating.) Second there needs to be a quantification and general dissemination of knowledge and details of the problem. (enter ecological economists, Ron Paul, theoil Drum.com, etc.) Though these facts may not be assimilated by the mainstream, the fact that some people are snaking an empirical path to the heart of discontent is important. It is how this factual spine makes its way into the social zeitgeist which is the relevant question du jour. Third, there needs to be a real event that pulls at peoples emotions so much that they perceive that doing nothing is worse than doing something. Such a recipe, or close to it, exists today.



"Inaccurate but effective?" "Accurate but ineffective?"

Which of the above images would make people more likely to change their behaviors???

I would guess 30-40% of our population is cognizant that something is wrong with our current path. They don't need to know the details of net energy decline. They don't need to understand dispersive discovery or decline rates to know we are dependent on fossil fuels. They don't need to have read Murray Rothbard or Frederick Soddy to understand we can't print our way out of a physical bind. However, I suspect that though my Aunt knows <5% of what the average people on TOD do, it is people like her, one day, perhaps soon, that are going to force change. They will do it not out of some epiphany of multidisciplinary understanding but rather out of outrage. Once the inner elephants of a large majority are engaged, anger, fear and resentment are going to matter more than facts, and more than science, at least for a while. I just hope that trust, love, pride, and kindness etc. will function as bridges.

At what point do we cross the invisible threshold of 'enough' facts? At what point do we as individuals have at least enough information to act? At what point to local and regional authorities have enough? Governments? This answer almost seems asymptotic to me - as we approach the limit point, we might need more and more details on the facts just to keep an information trajectory intact. In an odd twist, I am beginning to suspect that *not* connecting the dots is the only 'fact' keeping this system afloat. I am yet to decide whether this is a good thing or bad. For the majority, recognition of our situation wouldn't make them better off, as they would be either unable to act upon the right choices (i.e. have no real options available due to their personal situation or dearth of political alternatives), be too late (i.e. starting a society-independent lifestyle takes 10+ years) or simply unable to arrive at the right conclusions (i.e. desperation/anger can also lead to voting for right wing parties, going postal, going fanatically religious, etc). So if too many people arrive at a state of recognition without a framework and infrastructure to migrate to, we might just undo today's societies without anything to prevent something worse. In short, we are in a pickle, and it's a bigger and more complicated pickle than I

first understood. One that will require both man and elephant acting in concert, as well as taking turns.



For those interested, here were 3 previous essays related to brain/behavior:

[The Psychological and Evolutionary Roots of Resource Overconsumption Revisited](#), June 25, 2009


[Living for the Moment while Devaluing the Future](#), June 1, 2007

[Peak Oil - Believe it or Not](#) May 2, 2006

CAMPFIRE QUESTIONS

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1. Is there any ONE fact that if well understood and disseminated would change behavior at the global/national/state level?
 2. How do we, in the scientific age, integrate 'our inner elephant' with the man riding on top?
 3. Can we accelerate cultural change to occur *before* things fall apart, or will that be the starting gun?
 4. What to do, if anything?



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