

Excerpt #2 from draft of Ben Davidson's Upcoming Book

July 14, 2015

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Why don't you ask your lawyer to deliver your baby while thinking about how best to word that contract? Surely he can do something with his hands while he uses his brain. You would and save the time and money of the doctor and hospital. Why are there no physics professors publishing about shoes in Vogue magazine? Presumably they have the tenure to take some time off and professors are smarter, on average, than the writers... right?

I may actually beg to differ on that last point, but many people would not - you get my point, and I believe you all know the answers to the questions I just asked. This world is about specialization, and whether it is academics, research, business, sports, music, or anything else, people specialize or they fall behind, and wind up without a place in the system. There is nobody who can rightfully deny the benefits of specialization; medical innovation, technology, social and cultural evolution - all stem from laser-like focus on not just one science or art, but a specialty or even sub-speciality of that science or art. This is how nearly every piece of progress and innovations happens today, with the #2 slot going to blind luck on the part of the scientist or engineer or architect, etc. There is no denying the benefits of extreme focus.

Consequently, almost nobody steps back anymore. Even when people do step back, we are horrendously under-inclusive. Perhaps the largest-scale attempt to perform interdisciplinary review is the UN's IPCC - charged with figuring out climate change. The climate is another topic for later pages, but suffice to say that the global warming pause you heard about is real, as of mid-2015 the temperatures are not any higher than they were two decades ago, and they failed include the entirety of space weather except for one index, a large amount of reconstructed data going back hundreds and thousands of years, the facts about earth's magnetic field changing dramatically, and the information from physicists suggesting that the CO₂ 'insulation' model was not going to actually work here on earth - with our perfectly white cloud tops that reflect all the light. Another good example was the effort to put everything about the known universe into a computer and see how close they came - and ended up missing 97% of the universe.

As year after year the 'official expert predictions' skew further than further from the observed temperature of earth, this drawback of interdisciplinary integration is public and obvious. However, there are less obvious drawbacks to our overspecialized society

- we miss things that require almost no intelligence to discover. It is clear to me that solar physicists do not study earthquakes and hurricanes, seismologists and meteorologists do not follow sunspot numbers or study the solar wind. If there was any measure of overlap or cooperation between these individuals, these connections would have been discovered long ago.

The GOES SXI team has been able to see coronal holes and solar flares for decades - auroral monitoring goes back much further than that. The National Hurricane Center was able to pinpoint hurricane formation for decades. Seismic record have been very good for decades. It was simply a matter of looking, and nobody was looking. To earn a PhD and then climb to the top of your field you can assign neither the time or focus to look outside your little box.

Apparently, it was not until someone took the time to compile weather, space weather, and earthquake data, every single day, that we were destined to finally see the patterns at play here. Do you know who still uses interdisciplinary review on a regular basis? Lawyers and due diligence analysts - we don't have a choice. This is all I know, and it turns out that there are a number of fascinating discoveries simply waiting for someone to lift up their head and look around.

- The preceding paragraphs are the draft of a shorter except on the importance of interdisciplinary review.