Occam’s Razor, Resharpened

Mike Rainone

Sometimes, out of the blue, comes a reminder that the best solutions to a problem are not necessarily the most complex.

The Franciscan Friar William of Occam said it best about 700 years ago in the form of the principle of parsimony, which we now know as Occam’s Razor. William said “entia non sunt multiplicanda praeter necessitatem,” which for you non Latin speakers (and who is a Latin speaker these days?) translates to “entities must not be multiplied beyond necessity.”

Translated into English, that means the simplest explanation is usually the best, and big convoluted explanations are just prima facie evidence that you either don’t know what you are talking about or you may be trying to confuse things. For an example of the antithesis of Occam’s razor, listen to anything Alan Greenspan ever said to Congress.

The most recent reminder of this maxim came from the story of an Italian physician who, when faced with his wife’s impending demise at the hands of Multiple Sclerosis (MS), began a systematic investigation of the etiology of the disease, and just coincidentally may have found a cure. Not in a new drug, but in a simple surgery that is done every day, all over the world.

For anyone unfamiliar with MS, it is a debilitating neurodegenerative disease apparently caused by the deterioration of the myelin sheath that surrounds many of the important nerves in the body, especially in the brain. Until now, serious thinkers in the field, those supported by big Pharma anyway, believed that MS was an autoimmune disease.

For some reason, the immune system goes crazy and attacks the myelin sheath in the brain. People with MS suffer from a plethora of symptoms, such as cognitive and

motion impairment, visual problems, loss of dexterity and other rather unpleasant disabilities which come and go, but worsen with age.

Early work in the field focused on looking for a cause, but much of the work today seems to center on rebuilding the myelin sheath with drugs, with the hope of helping those with long term deterioration reverse the damage. Obviously, such work would also give hope to those in the early stages of this disease, who face a lifetime battle with the effects of the deterioration.

Dr. Paolo Zamboni, probably no relation to the famous family of ice re-surfacers, took a different approach. He looked back at early studies that suggested a buildup of iron was at the root of the disease. Now, and this is important, Zamboni is not a neurologist. He is a vascular surgeon, and with that background he was able to look at this problem from a different angle, that of blood flow, not autoimmunity.

Zamboni, who had been working on the correlation of iron buildup and the damage it caused to blood vessels in the legs, looked at blood flow from the brain, specifically the veins that drained the brain. In what looks to be a fairly well done, if limited, study, he found that virtually all MS victims had constricted venous drainage from the brain.

Furthermore, he found a significant build of iron in those veins, as well as a blow back of that iron laden venous blood into the brain. From his earlier work on the inflammation and cell death that results from iron (and other heavy metal) build up in legs, he hypothesized that the myelin sheath destruction happens because the excess iron attacks the veins in the cranium which produces inflammation and an immune response.

This allows the immune cells to leak out of the damaged veins, on the brain side of the blood brain barrier, misidentify the myelin sheath surrounding the nerves in the brain as foreign tissue and then go on a search and destroy mission. So, to the extent that the immune system is attacking one’s own myelin sheath, MS is an immune disease that is provoked by vascular system problems.

Zamboni's solution was a vein-opening vascular procedure akin to angioplasty, in which a balloon catheter is inserted through the groin and routed all the way to the jugular. The balloon is then inflated to open up the constrictions in the vein. Can you imagine the reaction of the medical community in the U.S. to this heretical approach? “Let’s see, you’re a vascular surgeon with no background in MS, and you want to do WHAT? What would our Big Pharma supporters think? You’re not even proposing the use of drugs!”

Zamboni began doing angioplasty on a series of MS patients, opening up the veins to allow the patient's brains to drain properly. The results were staggering. Of the 65 patients who underwent the surgery, 73% were symptom free after two years, including Zamboni's wife.

Needless to say, he has stirred up a hornets’ nest in the MS community, and those suffering from the disease are now clamoring for testing and surgery. Meanwhile,

those pursuing the old paradigm are cautious, to say the least. Apparently, the MS societies in both the U.S. and Canada have issued statements of caution.

In the U.S., the MS Association has allegedly issued a statement urging MS patients NOT to be tested for blockage or surgical treatment. Interestingly, after a quick search of the MSAA's web site, I could find no mention of ANYTHING having to do with Zamboni, CCSVI (Chronic Cerebrospinal Venous Insufficiency), or Liberation Treatment. I did, however, find tons of references to drug treatments.

Go figure. Perhaps they think that if they ignore it, it will go away, which of course in this Facebook-based world simply ain't gonna happen.

So back to my thesis: Zamboni, because of his unique background as a vascular surgeon and university professor, the husband of a victim of MS, and someone not co-opted by Big Pharma support, was able to get past the assumption of autoimmune disease and look at an old problem with fresh eyes. There are lessons in this story for all of us.

First, don't be fooled by conventional thinking. What did not work in the past may work now because technology improves inexorably. Second, examine the incentives of those who are doing the conventional thinking. Sometimes things outside of the truth, like money, influence and corrupt the search for truth. And finally, while I would never oversimplify this complex world to the level of H. Ross Perot's "it's reel simple" (complete with charts) dictum, I will say that going back to the basics, and questioning all assumptions about a problem, is always the best place to start.

Read more about Dr. Zamboni's possible MS cure here [1]

Mike Rainone is the co-founder of PCDworks, a technology development firm specializing in breakthrough product innovation. Contact him at mrain1@pcdworks.com *[2] or visit* www.pcdworks.com *[3].*

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