

Ask Jon Eakes

Personal thoughts as to why I am sceptical about the wireless industry's "scientific" position on EMF and Health

Last Updated: Friday, July 8th, 2016, Created: Sunday, September 16th, 2012

Reflections on why someone with a scientific orientation like myself might give more credibility to those who worry about the health effects of cell phones and smart meters than to those who say there is no "scientific proof" of a health problem. The following is an extract from an exchange with a pro-cell phone scientist.

Thank you for this dialogue. I find that your seriousness and articulation is a great stimulus to me to find words for and articulate what underlies things that my instincts tell me are important. I have read carefully through both the documents you sent me. As I was reading I was also observing that I was having my own sceptical reactions to the words before me. The logic sounded good, the research appeared serious but I keep finding myself brought back to my early days when I was very politically active (Vietnam war years) and spent a lot of time reading and discussing political tracts, theories and "proofs". It was fascinating how after a while one could identify the political bias of any document simply by the vocabulary and word structure -- the "tone" of the writing. Liberal, Conservative, Maoist, Trotskyites, idealist or opportunists. Bias can rarely hide behind words, even behind an effort at creating an objective mask or behind a sincere effort at objective inquiry. There is a taste, an odour to all writing.

SCIENTIFIC METHOD IS AN EVOLVING ART

Science, perhaps by definition, will not accept what it cannot prove. It is interesting to see that often means that a theory is not acceptable until we invent the means to measure it -- and then suddenly it becomes a scientifically acceptable reality. Yet all the years prior to this "discovery", the theory was right and perhaps doing damage to human beings, but we couldn't act on it because the scientists didn't yet classify it as "real". I was an engineering student and my first confrontation with "scientific method" was in my sociology classes. In my days sociology was defined as applying scientific method to social questions -- a noble aspiration. (See my word aspiration -- it both hides and reveals that I didn't believe it.)

What blew me away was the months we would spend applying clinical (even double blind) protocols to social theories and then evaluating the results with the rigours of statistical mathematics -- only to discover one year later that one or more of the assumptions we had made were wrong; assumptions that were necessary to fit the social phenomena into a clinically measurable box. These were not simple classroom exercises but often pseudoscience with human consequences. For example, the vast majority of government aid to impoverished Mexican immigrant communities in California was aimed towards farm workers based on rigorous sociological studies on how best to help them -- studies based on an unquestioned assumption that Mexican immigrants were primarily farm workers. One day it was "discovered" that the vast majority of the target population were exploited immigrants who did not live or work on farms. The farm workers were only the visible part of the problem - but the "scientific studies" missed that all important detail resulting in expensive programs that did little good. That started my long ingrained scepticism about clinical studies and scientific proof. Are pure science questions better served by scientific method? Today one could question if "pure science" even exists and is anything actually as it appears to be?

I learned to question the limits of science and man's incessant desire to box human reality into scientific proof. Even in my engineering studies I was fascinated by spider webs that defied stress

formulas, bumble bees which scientifically should not be able to fly and it wasn't until long after I left engineering that I discovered the book "Structures: or why things don't fall down" by J.E. Gordon where he points out that plants are constantly defying established engineering scientific principles. Yes science has allowed us to accomplish a lot, but it was not until the development of quantum theory that scientific method hit a brick wall -- or should I say an endless loop. The best vulgarization that I have seen of what appears to be an inevitable flux between science and mysticism is the DVD "What the Bleep do we know?" If you have not seen it, you will enjoy it.

THE SCIENCE OF PHARMACEUTICS AND THEIR LOSS OF CREDIBILITY

When we bring scientific method back to the human body and medicine we find incredible advances have been achieved by pharmaceuticals. At the same time we find all the wrong ingredients for credibility. Being a public person I travel a lot and encounter a lot of people in different fields. Several successful medical doctors have confessed to me that their primary source of "upgrading" is via pharmaceutical representatives who visit and explain the latest products. Then I have also met a number of young, just out of college, pharmaceutical reps (they travel a lot too, one of the perks of their jobs, and we have a lot of airplane time to talk) and they confess to me that they don't know anything more about their products than the "briefing" sessions they have with their own marketing departments -- and most admit to having been bothered at one time or another when there is a hushed about face with one product or another, a product that they had faithfully been driving into general use: vested interests - driving forces.

Your comment about one of the Bio-Initiative proponents being non-credible because he makes money in court cases could go both ways. Yes he could be just driving a lucrative business -- or he could be earning his living in the field he is passionate about. We all tend to become biased by our livelihoods -- and we all like to make money with what we know. I try to balance my vested interests with tool companies -- but when two tools are equal and one supports my work, I tend to support them. I get very sceptical of all of the pyramid health food marketing that are often more to do with business opportunities than human health -- yet this is an alternative structure that permits some higher quality products to get to market. The medium is something that raises my defences; the product is something to try to judge on its own.

SCIENCE IS MORE EFFECTIVE WHEN IT ADMITS ITS OWN LIMITS

Dr. Michel Mathiew was one of the most respected eye surgeons in Quebec. My wife knew him well as she has had one eye treated and operated on for the last 50 years. She had a contradictory condition requiring two drugs that aggravated each other so her life has been a careful daily balance between drops of one or the other. Her first two cornea transplants lasted a certain time each and then Dr. Mathiew told her that medical science could do no more for her. Her eye could stand one more transplant but that could not be done unless she managed to go for a full year without one of the drugs. He simply said, if you find a way to do what I cannot do, we will operate. So she undertook a very long journey into the field of human energetics, body fields and those meridians that your author says don't exist (at least he can't measure them). She learned to see and manipulate the subtle energies of the human body and she got that third transplant. If you are interested in that story she wrote a book: "Totalement Humain - Totalement Divin", Lorraine Desmarais, Les Éditions Quebecor. Last night when I showed her the documents you sent me about acupuncture, she calmly stated that some of that was simply not true. She told me about the conversations that Dr. Mathiew had with her about his trips to China where he witnessed eye and other head surgery (his speciality) where no chemicals were used, only acupuncture. So there is at least one specific case that throws doubt on the absolute conclusion that this is all myth. The real problem may be that "current science" cannot measure it nor explain it -- but does that justify the assumption that it does not exist? I see things on both sides that indicate that popular use of acupuncture probably does reach into the realm of "fads", and at the same time concrete cases that keep me from throwing the baby out with the bath water. My wife has convinced me that energy fields and meridians do exist. I have come to learn that dowsing is not mysticism but earth magnetic fields acting on human muscle electrical currents --

creating minute muscle movements that show up on the leveraged movement of the dowsing rods. The sticks aren't moved by the water, the muscles react to the interference of the earth's magnetic fields caused by the presence of water, particularly flowing water, and move the sticks. Sure there are lots of dowsing dreamers and some frauds yet dowsers can in fact find water more reliably than any geological measuring devices. Field workers in Alberta have told me that the scientific geological survey guys locate the field, but often dowsers determine exactly where to drill the hole. I have had better than statistical chance at finding water myself.

THE BODY IS A BIO-ELECTRICAL ORGANISM -- MAGNETISM AND ELECTROMAGNETISM DO COUNT

I firmly believe that the body is electric and I am fascinated by the whole field of bio-electrical-chemistry. With that as my "biased assumption", I look at EMR very differently. My experience with the limitations of boxing things into "scientific method" doesn't allow me to simply dismiss the probable interactions between rapidly changing electrical and magnetic fields and the human electrical/magnetic system simply because we can't measure them (yet).

The radio frequency scientists say that society should not try to protect us from something that they the scientists cannot prove to be harmful. Is this one more case where scientists cannot protect us from what they do not yet understand and do not want to "see"?

WHEN SCIENTISTS ABANDON SCIENCE

Self-interest is important when it is observed that the vast majority of industry sponsored research shows no relationship between EMF and human health, while the vast majority of all independent research shows just the opposite. The general public opinion today is that the pharmaceutical industry has diverted the general direction of western medicine toward the pursuit of profit not health. Is there any reason why we should trust our health to the communications industry and their carefully constructed doubly-blind "scientific" studies?

Four years after I first wrote this opinion piece, it is shocking to see the communications industry and their scientists, including the one I was corresponding with in writing the above letter, denying the findings of a 25 million dollar independent US government study from the US National Toxicology Program that cell phones can and do cause cancer. They say that this study can't be right because they don't understand how this could be right. When the epitome of scientific protocols have been followed and the results don't agree with them, they should be reflecting on how to apply this new information to the advance of human health, not on how to bury the study that interferes with their financial wellbeing.

Jon Eakes

Follow this link for the full debate on EMF and Health

Keywords:

Measuring, Quality, Radiation, Cell Phones, Electromagnetic Fields, WiFi, Smart Meters, Alternative, Health, Electrical