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Even bees do it, unless cell phones mess up their navigational systems: a meditation of science in the news.

It was just a blip of news, a nugget from the daily Democracy Now! News digest email. I read it and was in awe, and then I was annoyed. This piece of news is a mystery. A large portion of the commercial bee population is missing, gone, lost in space, AWOL, MIA. It is natural who done it. I almost expect Encyclopedia Brown or Hank the Cowboy to solve the "The Case of the Missing Bees."

Some investigators, after applying their inductive reasoning skills, have found a clue or two to solving this mystery. Researchers set up an experiment involving bees and cell phones. Based on the results of this limited study, they believe that radiation from the mobile phones may be disrupting the bees' ability to find their way home. This has important implications for agriculture, which I will get back to after a tangent about how scientific data is interpreted by the media.

The news about the bees from Democracy Now! was written to make sure that we understood that the study was limited, that "some" scientists believe cell phones might be causing this baffling problem. But the piece concludes "the disappearance of the bees could cause massive food shortages because most of the world's crops depend on pollination by bees. Albert Einstein once said that if the bees disappeared, 'man would have only four years of life left.'"

By framing the data this way, not only does Democracy Now! indulge in "the sky is falling" reporting, which I have grown weary of, it makes it deceptively easy for the reader to conclude that the results are fact versus inconclusive, preliminary data. While it is true that agriculture depends a lot on busy bees pollinating the crops, and it may be true that Einstein weighed in on the question of what the world would be like without bees, I'm not sure this one study warrants this sort of catastrophic framing.

I'm left asking how long have the bees been MIA? Are we seeing noticeable affects already? Or are other pollinators filling in the gap? Do we really need to talk about massive food shortages at this point or would it better to say that "The Case of the Missing Bees" might have negative impacts on world agriculture?

It is unlikely that most readers will ask these questions. The general public is not taught to critically examine science news. Most people do not understand the scientific method. Most of the news media, from the mega corporations to the fiercely independent, forget that one study is almost as useless as tits on a boar hog. It is a starting point, not a conclusion.

By forgetting to put the research data in its proper context, the news media, including and perhaps especially "the end is nigh" lefty media, distorts the scientific data. The news fails to tell us how many studies have been done or what methodology was used. Without that information, it is hard to draw useful conclusions. The data is simplified.

Grand statements are made. Journalists present the data as fact when that may not be justified.

I will have to track down the research. My housemate did some research and found that there is some speculation that a fungus might be the cause of the bees hitting the dusty trail. It may be too early in the process to come to any solid conclusions. The data must be tested. We need to question the results. Have the results of one team 's research been found by subsequent researchers? Are the conclusions drawn from the data valid? How was the study designed? How large of a bee population was studied? Was there a control group of bees not exposed to mobile phones? How were the bees exposed? How many studies have been done? How great is the consensus on this issue?

Perhaps, this is asking too much of the news media especially considering that the sound bite has sunk its teeth into the media and is shaking it around like a terrier shakes a captured rat. I am fed up with poor science reporting. I think that sound bites do a disservice to the complexity of science news and are a contributing factor is scientific illiteracy

But I digress. A couple of weeks after I was annoyed by the headline snippet from Depression Today!, I saw an advertisement for a TV news piece on "The Case of the Missing Bees." Since I didn't see the show, I won't comment on it, but it reminded me of the awe I felt after reading the Democracy Now! headline. Like pearls before swine, awe came before annoyance.

I was struck by how a simple thing like the missing commercial bees could (possibly) have a major, even catastrophic, impact on our lives. I was in awe of how little we understand about the effects of our technologies on our world. It reminded me of how horribly we have polluted our environment with the chemical cocktail we have created in striving for "better living through chemistry." I felt some despair at the idea of massive food shortages caused by our tool making. Apocalyptic ideas tend to seize the depressive parts of my brain and run around like chickens with their heads chopped off, spurting blood over everything. I end up seeing the future of the world through blood colored glasses.

Yet part of my awe was for the complexity of our tool making. We fabricate tools so complex that we do not fully understand the impact that using those tools will have on our environment, on our lives. Despite the sometimes stupendously negative consequences of our creating new tools and technologies, I cannot help but be amazed by what we have made. Until the recent slang appropriation of the word awesome, awe and awesome referred to things that cause both fear and reverence. I am in awe of our works. I feel both reverence and fear.

I think it is time to bring awe back into our science reporting. The black and white of newsprint is translated to our new, more colorful technologically advanced media. The news captures our attention with sensational stories. I think that too often science news is presented as either wonderful or horrific. It will save us or doom us. It is a glorious step into a better, brighter future or a descent into a dystopic nightmare that threatens

to wipe out the humanity. As a professional fence sitter, I think that it is both. I would like to see science news that is more nuanced; that presents something closer to the truth about our scientific searches and struggles. Give me reference and fear instead of glory or terror.