

When the Plants Found Their Voice

By
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The professor of history began his lecture with a simple reminder of how sound can be made.

Air moving between two pieces of material can create the vibrations we recognize as sound. Air moving between the thin membranes of our vocal cords can create speech or singing. Minor adjustments in the tension on those membranes and the spacing between them create verbal communication. Air moving between the reed and the mouthpiece of a clarinet creates a sound we call music. Two surfaces and air movement. So simple, but so infinitely variable. Hold that thought.

It was back in the 21st century that botanical scientists were genetically modifying crops. There was resistance to their introduction into the food chain, but in time, resistance proved futile. Even farmers who didn't buy genetically modified seeds found that cross-pollination had rendered their crops modified. Better to go along with the changing times and buy the modified seeds and reap higher yields per acre.

It was in the mid-21st century that a geneticist playing with the tobacco mosaic virus found a modification that doubled plant leaves. The twinned leaves led to healthier crops, more rapid growth, and this was in part due to the ability of the twinned leaves to move to capture the best available sunlight. Movement was under the control of the node where the leaves attached to the stem. That node had control of the veins of the twinned leaves. What no one expected was that the plants had a way to coordinate all the leaves. A form of sentience that seemed to emerge not from one site, but from a consciousness that arose from the totality of all the nodes acting in concert. Much like human consciousness seems to be a summation of individual neurons. A whole greater than its parts.

The first farmer to report that his crops were speaking to him was John McVey. He claimed his Iowa corn field was telling him how unhappy they were that he stripped them of their reproductive organs and then plowed them back into the ground. They called it genocide. McVey was dismissed as a mental case, but he managed to convince a local newscaster to come out to the farm and have a listen. The story was a sensation. The reporter was able to carry on a conversation with the corn field. Botanists from both the University of Iowa and Iowa State converged on the field. Their investigations showed that the vibrations of the leaves were indeed making audible sounds that mimicked human speech. What was more astounding was how the corn field could understand human speech and appropriately respond. They theorized that our voices caused those same twinned leaves to vibrate, and those vibrations were somehow understood by the corn field.

Further investigation found that a single corn plant was not able to understand human speech; rather, it required a synthesis of many plants to do that. It had been known for years that the root structures connected many plant systems, but the level of communication between those plants was not clear. The McVey field showed that plants were aware of their environment in a manner similar to what animals could perceive. And this was achieved by some form of integrated communication with the whole exceeding the individual.

The botanists keep probing and found that the node's control of the leaf veins was exquisite. It was as finely tuned as the human vocal cords. How a field integrated the reciprocal vibrations of the human voice was as mysterious as how humans create thoughts out of electrical impulses.

It was in the latter half of the 21st century that the twinning of crops began to appear in trees. Geneticists identified the modified tobacco mosaic virus as now present in trees with twinned leaves. It was believed that the virus had jumped from one species to another, not unlike how viruses do between animals and humans. The first talking grove was in Washington State. An apple grove on Pete Stevens' farm. Stevens didn't suffer the public ridicule that McVey had to go through. He was believed, and a team from Washington State University confirmed his trees were behaving like the genetically modified corn. Vibrations of the leaves created the sounds, and the trees spoke perfect English.

Isolated individual trees were mute. It was demonstrated that communication between trees was needed for human speech to emerge. An individual tree could make sounds, but those sounds were more like human humming. The ability to understand our language and then use that knowledge to create intelligent responses was some form of integration of information that required a grove. Once again, the whole was greater than the parts. The grove could do what individual trees could not.

Twin-bladed grasses found their voice. They complained that humans mowing them made them horse. Without the full natural blades, the grasses had stiffer blades to work with, and this produced more of a raspy sound. Humans countered that while the grasses were raspier, they were also more attractive when mowed. This seemed to placate the lawns.

Stevens' apple grove had questions for the humans. The grove said that trees reproduce by putting their fruit right out in the open so that their species could expand. But humans kept their reproductive organs hidden. How did that work? The humans explained that reproductive organs were exposed indoors. The trees found that odd, but decided that perhaps it was for the best, as it kept humans from overwhelming the plants. At least so far.

In time, talking fields and groves became commonplace. Communication between humans and plants became routine. This created issues for vegetarians and vegans. Once humans and plants were communicating, it became impossible for people who ate only plants to claim any moral high ground. It was clear that it was a matter of survival for humans to consume something that could sustain life, and no matter whether it was an animal or a human, it was taking another's life. At least with plants, it was more a matter of taking the life of the next generation, rather than the current one. Just eat the fruit. The plants called it infanticide. But what are you going to do?

As the generations passed, fields came and went, but trees endured for generations and became known as elders. Their wisdom was sought by some and ignored by others. Much as human wisdom had always been handled. The plants encouraged humans to avoid overpopulation as they feared they would be unable to provide adequately for a larger population. And the plants had a lot to say about global warming. Suffice it to say that they were not happy about it. They couldn't up and reroot at will. They had to just stay put and endure. It caused stunted growth or premature death. They warned the humans, but humans weren't as considerate of the next generation as a tree that lives for many generations. It was wisdom ignored. A familiar refrain.

Communication with the plants became routine, but no progress was being made as far as talking to the animals. That was proving much more difficult. There were some plants that claimed to be able to speak for the animals, but they were dismissed as talking nonsense. Or worse. Plants with a political agenda spreading lies about what the animals were trying to tell us. Humans being human. It was a story as old as time.

[The notion that plants can act as a group is not far-fetched. Birch tree forests in central Europe had been studied, and it was learned that when an infestation takes hold in one part of the forest, distant parts start making substances to retard the infestation. They talk to each other. Is it such a stretch to think they might speak to us? If only...]

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