


THE REAL DEAL

The most fundamental and obvious thing Michael Pollan is talking about in “Playing God in the Garden” and Phillip Angell in “Monsanto’s response” is knowledge. To be more specific, they are introducing us to their standard of knowledge. Pollan values the most the kind of knowledge that will not just give him an answer he is looking for, but the knowledge he gets from experience. Angell has completely given into the knowledge of science and let it guide him through life. That is why neither of the two authors is right, because they are using two different standards to prove their point. For us to solve the problem in the real world we can’t just use one standard or the other because that is a one-dimensional way of solving the problem. And since our problem is multi-dimensional, we have to use a mixed version of the two, formatted to better solve all aspects of the problem. That is why to solve the conflict between Pollan and Angell we need to assume that only the scientific knowledge that can be applied in real life by an average human being is the kind of scientific knowledge that should be counted as useful to resolve the conflict, but at the same time we should not ignore the part of knowledge that is gained through experience and use it as a formatting tool for the scientific knowledge, and then together they will make up a well-rounded standard.


The two essays, to put it short, are basically defending their own position, meanwhile ignoring the other side of the problem, and that is also a very one-dimensional way of thinking which is unacceptable in the real world, therefore neither of the authors is right for doing that. Pollan, for example, is completely ignoring any of the good sides of biotechnology, which Angell noticed when he said that: “ What your story didn’t tell is

this: biotechnology is the single most promising approach to feeding a growing world population while reducing damage to the environment” (Monsanto’s response). Pollan is not giving biotechnology any credit, or more likely conveniently avoids doing that because that will make his point look more valid. He also says: “The biotech industry, with the concurrence of the Food and Drug administration, has decided we don’t need to know it, so biotech foods carry no identifying labels.” This is just one example of Pollan’s daring statements in his very audacious paragraphs. Any educated person can tell that the industry itself did not decide on anything, and even if it did, there is no doubt, they had a valid permission or reason to do that. Which, as we can see later in the essay Pollan finds out on his own and gets this answer:” ... if the original potato is safe and the Bt protein is safe, then the whole New Leaf package is presumed to be safe.” (467). Now, again, he calls it an assumption, but if that’s all it was, the product would not have been allowed on the market, and a good reason to say that is that every product of its kind is always being tested the same way, therefore there is really nothing different in the process then testing a new kind of tomatoes, or new kind of car, etc. So the only question that stands out right now, is “Why is Pollan only questioning a new kind of potatoes, which he ends up not eating anyway, makes this big mess out of it, but not ever mentions any other product that he has probably used for years that might have a lot more wrong with it than just its label?! Can we say selective criticism?” 

Angell at the same time has not mentioned any of the damages biotechnology has done for the same purpose of proving a point. But he takes a slightly different, but obvious approach of a scientist and throws at us piles and piles of numbers and various data and facts. That approach, as it was figured out earlier, is not the right one, because it


is one-dimensional, but at the same time it is much more professional and therefore more believable to the people. In other words, we can really see that all of Angell's claims about the flaws of Pollan's essay are valid, because they contain the kind of proof that not only contains numbers, but also points of view of people with experience:

While we recognize no one possesses the Holy Grail in agriculture, what is troubling is that, in spite of being an organic gardener yourself, you failed to present the views of the many independent plant scientists and agriculture experts who tell a story about biotechnology and sustainability very different from your personal view. Troubling because you interviewed many of these experts and were provided with information from many sources -- such as Green Revolution founder and Nobel Prize winner Norman Borlaug, Ph.D., botanist Roger Beachy, and sustainable development champion and former President Jimmy Carter. What makes those omissions all the more disturbing is that of the only two "outside experts" (neither a plant scientist) that you cited in this essay, one, Andrew Kimbrell, head of the self-styled International Center on Technology Assessment, is, in fact, as you know, neither an expert nor an objective voice, but rather a long-time public antagonist of biotechnology (among his many causes over the years). As recently as this month, Mr. Kimbrell has written two highly inflammatory, and wildly inaccurate, articles critical of Monsanto in the most recent edition of a British magazine, styled the "voice of radical green thought for over 30 years." To ignore well-known and responsible supporters of biotechnology, and rely on radical polemicists is to mislead readers as to the true nature of the issues and the debate. (Monsanto's response)

What this quote shows is that Angell is not just using his scientific knowledge blindly, even though he is not technically including the other people's opinions, but at least he makes a reference to more valid resources, which in the end makes his claims a lot more factual and logical, and shows the terrible narrowness of Pollan's vision, moreover, it makes his claims look unfounded and just plain old silly. 

Now, even though Angell's point of view is a lot more objective, does that mean that he should be right and Pollan wrong? It is very tempting to assume so, but the problem gets a little more twisted. With the proper evidence, we have seen repeatedly that Pollan and Angell have deliberately disguised a lot of important fact from the reader, therefore misleading them into believing that the one is right. Pollan says:" and then Hjelle uttered two words that I thought had been expunged from the corporate vocabulary

and long time ago: ‘Trust us.’ ... ‘Trust’ is a key to the success of biotechnology in the marketplace” (465). This statement is fundamentally true, because that is a path of millions of people in our world towards not just technology, but economy and science as well. Naturally, we would expect both of the authors to do the same, but unfortunately not one of them has adhered to this old rule, and that is precisely why they are having this ridiculous argument. On the other hand, since we are supposed to use trust as the key then how can we possibly believe Pollan or Angell, if both betrayed our trust as the readers by not telling the whole truth? We cannot, that is why neither way of thinking on their own can be used to get to the bottom of the problem.

First of all, biotechnology needs to be looked at as any other situation that human beings come in touch with. In other words, it needs to be looked at as having two sides to it: good and bad; To better understand this concept, it is necessary to use a more  economic term opportunity cost and trade-off -- two of the most important concepts in microeconomics. Now, in this particular case it is a matter of figuring out what are we willing to give up (opportunity cost) in order to not just have a new kind of potatoes, but a new kind of technology, that might even be a door to something even greater, but we certainly won't know that unless we let the technology take its course and be a part of our life. This process is called trade-off, because we're giving up something to gain something else. Pollan, as well, is concerned with this particular problem when he says:

Take the case of insect resistance to Bt, a potential form of “biological pollution” that could end the effectiveness of one of the safest insecticides we have – and cripple the organic farmers who depend on it. The theory, which is now accepted by most entomologists, is that Bt crops will add so much of the toxin to the environment that insects will develop resistance to it. Until now, resistance hasn't been a worry because the Bt sprays break down quickly in

sunlight and organic farmers use them only sparingly. Resistance is essentially a form of co-evolution that seems to occur only when a given pest population is threatened with extinction; under the pressure, natural selection favors whatever chance mutations will allow the species to change and survive. (465)

Angell responds to this statement with the following:

Resistance management is not a new issue for agriculture. All methods of controlling weeds, insects and disease must in some way deal with potential issues of mutation and adaptation. Historically, one solution has been the creation of ever more powerful, and potentially harmful, chemicals. The careful stewardship of the insecticide Bt, that provides an environmentally sustainable means of controlling pests to all farmers, organic or not, is in the long-term self-interest of Monsanto and every other company in this industry. Varieties of Bt will be available to all farmers, no matter how they use it, and it serves no one's interest, especially ours, to see this technology rendered obsolete in the matter of a few years. (Monsanto's response)

This example has a sole purpose of showing us how the fact that we don't trust either of the authors does not in any way affect or interfere with our at this point natural to agree with what Angell is saying, without actually agreeing with Angell. This might not make any sense at the first glance, but if we look a little deeper then we will notice that the difference between the two essays answers this question. That difference is the fact that anything that Pollan states is nothing but his opinion and his point of view, but Angell's essay is a factual proof, not based on Angell's opinion or experience, but on the experience of the entire field of agriculture and biotechnology itself. Knowing this, it is very easy to understand that we might absolutely not agree with Angell, but we cannot deny the factual evidence of his essay.

The next most logical question to ask would be: "Well who is going to decide what should be considered as the minimum damage and maximum efficiency?". It is

obvious that just letting Pollan or Angell answer the question will not solve the problem because they are on each different side of it, and the problem is an invisible bridge between them that should be used to answer that question instead of trying to prove each other wrong. But by using the missed standard of knowledge, we can see that the scientists should be the people to decide what chemical is damage and what is not, while the people should figure out if they want regular potatoes or the ones that are genetically engineered. And since people are the market, therefore the fact whether they trust biotechnology or not, will in the end determine whether the product is successful or not.

Another issue at hand, becomes the fact what science might consider to be safe might not be safe enough for the people like Pollan, which if at a great scale will eventually affect the market itself. So really, neither Pollan's way nor Angell's way is going to resolve the problem, because it is starting to look like they per say are not the ones who are going to determine anything. In other words, the two are powerless in this issue ... but are they? Even though they do not actually determine the safety, as we have concluded earlier, or the need for New Leaf in the market, their experience is what matters. How so? Since the thing that matters the most is trust, therefore both authors have no other choice but to make people trust them, and the way to do that would be by showing a good history, or successful history with their ideas. Meaning use their experience to convince us that their point of view is more objective and useful.

This point has opened up the real problem the two are having with each other, that I think doesn't really have anything to do with science or farming. Pollan has crossed the line of writing by trying to undermine biotechnologists' authority, or even make Monsanto look like an idiot by trying to find a tiny thing that they supposedly such smart

people have missed, but Pollan is a hero because he dared to ask that question. NO! There is nothing wrong in asking questions or being curious, but it is highly unprofessional of him to try to define biotechnology based on a sort of potatoes that he is holding in his hand. Just because they did not have a label gives him a right to ask for one, but it does not give him any right to try and judge an entire field of study. Furthermore, knowing that technology had opened up so many opportunities for the world already, that we should as Pollan mentions in his essay with sarcasm “Trust them” (465). I mean, why be sarcastic about it and try to make it look like a trick of the market, haven’t the science given us enough reason to trust them? So, why worry about a label of potatoes or their safety, since it’s not even a huge part of our society yet, when we already have people who are supposed to check them and test them, so there is no reason for us to do it. If the appropriate organs say it’s safe – it’s safe. No reason to make a problem about it, I think we have enough to worry about as it is.

