Featured Article

From Tunnel-Vision to Panoramic Fog – An Essay on How Philosophy Can Help us Better Understand Consumers' Pursuit of Ethical Food

Christopher M. Drohan, and F. Bailey Norwood*

Christopher M. Drohan is a teaching assistant professor at the Department of Philosophy at Oklahoma State University. F. Bailey Norwood is a professor at the Department of Agricultural Economics at Oklahoma State University. Editor in charge: Craig Gundersen

*Correspondence may be sent to: may be sent to: E-mail: bailey.norwood@okstate.edu

Submitted 00 Month 2020; editorial decision 00 Month 2020.

Panoramic fog – (noun) the state in which a well-intentioned individual seeks to understand how their actions impact the world, but the difficulty of doing so induces them to seek comfort in convenient answers, leading them to spend more time reinforcing their acceptance of those answers than questioning them. In the process, they create an irreconcilable gulf between them and persons who accept other convenient answers.

Key words: Consumer preferences, Ethical food, Genetic modification, Organic, Philosophy of food, Sustainability.

Oliver is a butcher and has been for years. Every decision he makes as a butcher has a clear and logical justification. When asked why he separates the brisket from the chuck roast, he explains that they are cooked and valued differently by the consumer. Should consumers change their preferences and suddenly want to purchase briskets and chuck roasts together, he would gladly do so. Oliver is an adroit butcher and has nearly perfected his role in the beef supply chain. He has the time to perfect his skills because he entrusts the many other duties of beef production to others. If he also raised and slaughtered the cattle, he would better understand the beef production process as a whole, but his butchering skills would suffer. Moreover, the beef supply chain would be the worse for it.

Hundreds of miles away, Mohammad operates a single piece of machinery that removes the hide from dead cattle at a slaughtering plant. Mohammad is only trained to use this one piece of machinery, but he does it well, allowing the plant to process 4,000 head of cattle every day. There is no confusion as

^{© 2020} The Authors. Applied Economic Perspectives and Policy published by Wiley Periodicals, Inc. on behalf of Agricultural & Applied Economics Association.

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

to the best way to operate this machine, but if you do demonstrate a better way, Mohammad adopts it eagerly.

South of Mohammad is Grace, who raises silage that is fed to the cattle that Mohammad will slaughter and Oliver will butcher. The tractor and silage cutter are like another arm to Grace. She knows exactly when to plant the corn, when to harvest the corn, and why. Not only is she unable to perform Oliver or Mohammad's job, but the thought of doing so never occurred to her.

If Grace, Mohammad, and Oliver traded jobs for just one day, disaster would ensue. Their individual specializations have value because others are specializing in different roles of the beef supply chain. This supply chain as a whole is highly efficient because each worker is efficient, and because markets allow them to coordinate their skilled activities efficiently.

This is an excerpt of the modern economy – a tiny slice of economic activity highlighting one of the major factors of our enormous prosperity. For brevity, the story above focused on just a small part of the beef industry and ignored the various other individuals in its supply chain, such as the janitor at the factory making ear tags for cattle, or the logistic specialist deciding how the cattle lips that Americans do not want will be shipped to other countries where they are prized.

This excerpt of the modern economy focuses on specialization, division of labor, decentralization, and trust in the supply chains. John Seabright uses more ordinary language in *In the Company of Strangers* when he calls it *tunnel vision*, describing it as "the capacity to play one's part in the great complex enterprise of creating the prosperity of a modern society without knowing or necessarily caring very much about the overall outcome" (2004). Oliver, Mohammad, and Grace all work with tunnel vision, concentrating on doing their job well, while remaining largely oblivious to and unconcerned with the rest of the beef supply chain.

Out of the Tunnel

Economists are at their best when describing the supply side of food, as the production of food can be adequately described as a mathematical optimization program. The use of tunnel vision and communication through prices is highly efficient, maximizing the value and minimizing the costs of food. As technology is developed it is quickly integrated into the supply chain to increase value and efficiency, just as the relaxing of a constraint allows a maximization program to increase its objective function value.

In the consumption of food, however, algorithms are less useful as a metaphor, for it is on the demand side of food that human nature truly reveals itself. Oliver is not only a producer of food but a consumer. He has a particular fondness for organic food. Ask him to explain why, though, and he is somewhat embarrassed because he is not sure. At first, he may explain that organic farmers do not use pesticides, but when corrected and told they can use "natural" pesticides, it is not his opinion about organic food that changes, but his justification. Now he states that organic food is healthier, and that is why he chooses it. This claim can be countered, but to do so is pointless, because the reasons will then shift to other things like ecosystem services, greater support for small farmers, and the like. However well Oliver may understand his actions as a butcher, his actions as a consumer are a mystery to both himself and others.

When pressed to explain his true reasons for buying organic, Oliver may even begin to use concepts bordering on the sacred, like, "It's just more natural." This appeal to sacredness is shared by Mohammad, who is a Muslim. Mohammad consumes beef, but not swine, as pork is forbidden by the Koran. But why? This taboo can be traced back to the Old Testament, yet it is not clear why the writers of the Old Testament disallowed pork. (There are ideas, of course, including a desire to only consume animals that are strictly vegetarians (Soler 1996), prevent disease (Durant 1935), and reinforce group solidarity (Miller II 2019), but there is no consensus.) As producers, Oliver and Mohammad are unconcerned with anything except their job. As consumers, their goal is not just tasty food, but a desire for some kind of "cosmic harmony," which is to say a desire to restore and maintain some kind of metaphysical order and balance in the universe. Their ideas about how to achieve this harmony have origins that Oliver and Mohammad likely cannot fully understand or explain, and a structure that is largely impervious to facts, and which provides them with meaning as well as cultural separation from each other. (It should be noted that some would consider food choices stemming from religions that have lasted more than a millennia as being less arbitrary than Oliver adopting an organic "lifestyle," but the two have parallels that are worth exploring.)

Grace has her own peculiar standards for food: She avoids eating foods with GM ingredients. In some respects, Grace has a profound lack of understanding of genetic modification. She falsely believes that new plant varieties created through radiation-induced genetic mutations are considered GMOs, and she does not understand the extensive testing required to ensure that transgenic plants do not cause food allergies. However, Grace is quite familiar with conspiracy theories regarding corporate control of regulatory agencies. For instance, she might recall that the part of the documentary *Food, Inc.* describing how Monsanto sued farmers for replanting the GM seeds they harvested made an indelible impression. The idea of a large corporation tweaking a gene here and a gene there to increase their profits does not, to Grace, portend a safe and socially harmonious food supply.

If terms like "cosmic harmony" seem excessively spiritual or metaphysical, just replace it with a strong desire for ethical food. People are paying substantial premiums for eggs produced on more humane farms (Chang, Lusk, and Norwood 2010), for coffee farmed in a more socially just supply chain (Weber 2011), and for organic vegetables thought to be environmentally friendly (Oberholtzer, Dimitri, and Greene 2005). So concerned are some about climate change that they have designated what is arguably one of the most humanely produced meats — beef — as reprehensible. (Beef tends to have a high carbon footprint relative to other foods, but whether these footprints are good measures is debatable. Nevertheless, those most ardent in the pursuit of lower carbon emissions do tend to label beef as a climate change culprit, as when an early draft of the Green New Deal lamented the fact that eliminating cattle would be difficult.)

There is an undeniable rise in consumer interest in how their food purchases affect other people, livestock, and the environment. They even appeal to transcendental concepts like "natural." This is not to say that these concerns produce their desired result, but the motivation is on display. The modern consumer often wants to have a panoramic perspective on their food, hoping to understand all the ways their food's production impacts the world in order to ensure that the food they purchase is more than just ethical, but laudable. Yet how many of them are actually willing to spend the time researching this and formulating informed conceptions of these relationships? Very few, and even if they do, that research often provides nuanced answers instead of the clear directives they were looking for.

Their unwillingness to seek deeper knowledge about their food is understandable, as the effort to do so is often discomforting (Bell, Norwood, and Lusk 2017). We're reminded of Nietzsche's warning at the beginning of *Beyond Good and Evil* that "It might even be possible that *what* constitutes the value of these good and revered things is precisely that they are insidiously related, tied to, and involved with these wicked, seemingly opposite things—maybe even one with them in essence. Perhaps!—But who has the will to concern himself with such dangerous Perhapses?" (Nietzsche 2003, p.34). For example, organic food may not be better for the environment, local foods arguably have a higher carbon footprint, herbicides prevent soil erosion, healthy food often entails the use of unsafe labor practices, and economists and social justice advocates alike worry that "fair trade" goods are not as fair as they seem.

When faced with the possibility that what they consider "good" might actually be "bad," and that the difference between the two is usually nuanced, the consumer has two choices. She or he can commit themselves to learning more until they have resolved the problem or can stubbornly defend her or his previously held beliefs. The latter seems to be a popular choice (Burton 2009).

Into the Fog

Please do not interpret this essay as a criticism of today's food utopians. It is instead an effort to better understand the human experience through the introduction of a concept we call the *panoramic fog*. Like tunnel vision, the fog simplifies a complex world. Unlike tunnel vision, though, it is not about ignoring everything except the task at hand. Instead, its objective is to understand and manage the complexity of the world in a holistic – but still simple – viewpoint. The panoramic fog is a kind of myopia that allows one to see no further than what is at hand, even though they want to understand the big picture behind it. Instead of seeing the tangled network of relationships connecting food purchasing decisions with outcomes, they rely upon vague terms like "organic," "natural," "probiotic," "non-GMO," "sugar-free," "family owned and operated," "sustainable," etc.

Panoramic fog is not confined to consumers. Let us revisit Oliver, Mohammad, and Grace again—this time, though, a panoramic fog settles in their respective workplaces. Each one now insists that their job employs only ethical practices. Oliver wants to ensure that all workers upstream and downstream in the beef supply chain are treated fairly, so he only works with companies that he believes use safe practices and pay fair wages. Mohammad pursues cosmic harmony by only working at halal abattoirs. Meanwhile Grace, the silage producer, only raises non-GMO corn.

Oliver, Mohammad, and Grace each maintain their own ideas about what is fair, holy, and environmentally friendly, respectively. Though these goals are important to them, time is scarce, and they conduct little actual research into them. Perhaps more importantly, each concludes that more information is unlikely to change their mind and is thus unnecessary. Just as tunnel vision and panoramic fog are found in food production, so too are they found at the level of consumption. With respect to the former, price point, taste, and convenience are the major drivers of food purchasing decisions – not cosmic harmony. Some consumers even admit in surveys to not wanting to know how their food is produced, presumably to avoid the anxieties that would accompany this information (Bell, Norwood, and Lusk 2017). However, we argue that panoramic fog is more prevalent on the consumer side of food because they have greater freedom in what they buy than producers have in their choice of suppliers and production methods. Moreover, food companies compound the fog by the proliferation of food labels that prompt consumers to take sides and consider aspects of their food that they otherwise would not.

The tools of economics are often unsuited to describing this consumer side of food. This is perhaps an unfair criticism, as all scientific tools have limitations that pair with their strengths. Consumer theory provides unique insights into how food prices relate to one another, how purchases change in respect to prices, how consumption changes with income, etc. However, we wonder if economists might spend too little time exploring the human experience in making food decisions. There is no phenomenological or existential subfield within economics. It is here that economists need the help of others, like anthropologists and psychologists. Yet the field most helpful is led by the least human of all the *homo sapiens*: philosophers. We say that partly in jest, but note that it was Nietzsche who wrote books (e.g., Beyond Good and Evil and Human, All Too Human) lamenting being "too human," hoping that the best of us would strive to become a better species. Philosophers are also well equipped to entertain ideas others find unappealing, having been trained to always consider arguments for the antithesis of a position, even if that position is abhorrent.

So, let us borrow three concepts from philosophy to help us better understand the consumer side of food. Below we take a tour of (i) *"Lebenswelt,"* get caught in the (ii) *"web of belief,"* and find ourselves in (iii) *"bullshit."* Doing so will allow agricultural economists to go further than saying that food is partially driven by concepts like *"identity,"* but will help them understand the nascence of that identity.

The Lebenswelt

Science works towards a more objective understanding of the physical world around us. Like scientists, philosophers want to understand the world as it physically is, but they are also keen to understand the world as it is perceived by others. Doing so allows them to understand people better, which in turn improves their understanding of observed human behavior. However, there's a vast difference between how science describes the physical world and how we tend to think about it in our own minds. This creates a problem that David Chalmers (1995) calls the "hard problem of philosophy" – a problem that should concern agricultural economists as much as it does philosophers.

Consider the opening three chords to Deep Purple's "Smoke on the Water," so familiar to those our age that they were jokingly called the "holy trinity of rock and roll" by the Canadian comedy troupe The Kids in the Hall. These chords are often the first ones learned by guitarists, due to their familiarity and simplicity: E-G-A. This theme exists in two worlds. For the scientist, the

base notes of these chords represent soundwaves of approximately 164.8 Hz, 195.9 Hz, and 220.0 Hz, respectively. These wave frequencies are explained by the length and width of the strings from which they emanate, and variations in how these chords sound are further explained by objectively measurable components of the instrument, like material density. From a scientific perspective, there is a singular and unambiguous interpretation of the chords.

Yet for persons the interpretations are numerous and often dissimilar. For a Boomer, the sound of E-G-A is the unmistakable mark of a truly great song and brings with it memories of hearing it played on the radio while riding in the backseat of a Plymouth Road Runner in 1974—smoking cigarettes, ecstatic to be alive and back with friends after returning from the Vietnam War. For a Millennial it might conjure the annoying memory of her dad playing the same song over and over in the garage. Years later, after the father has passed, the theme now reminds her pleasantly of her father during his happiest years. The chords here are not wave functions, but palpable memories, urges to dance, symbols of a common culture, and other forms of subjective emotions—in other words, *music*.

The divide between these two different understandings is what Roger Scruton (2014) calls "cognitive dualism." All of us can understand the world in two incommensurable ways: the way of science and the way of interpersonal understanding. In our best effort to sound pretentious (we are professors of the ivory tower, after all) we'll follow Scruton's lead and call the later by its German moniker: *Lebenswelt*.

Lebenswelt (translated as "lifeworld" or "living-world" in English) was introduced as a philosophical concept by Edmund Husserl (1859–1938) in his 1936 book *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy* (Husserl 1954). The crisis Husserl alludes to is the western world's excessive focus on the objective and scientific world and its neglect of the world as it is perceived by humans. In the subjective interpretation of "Smoke on the Water's" E-G-A, the person's relationship with others deeply informs their interpretation. Husserl urges us to acknowledge the importance of other humans as we live our lives, and how our lives are shaped as much by them as our own inclinations.

The story of phenomenology after Husserl is as interesting as the concept itself. Being both German and Jewish, the rise of Nazism cut his work short. Due to his Jewish descent, his position as Rector at the University of Freiberg was given to Heidegger (1889–1976), an influential philosopher but also an avowed Nazi. Heidegger transformed phenomenology into an existential philosophy, which would characterize the *Lebenswelt* as a state of mind where we are "always-already" distinctly aware of "the they" – the amorphous crowd of others living alongside us, among whom we spend most of our "average everydayness," and to whom we spend most of our time trying to appease (Heidegger 1962).

Terms like "always-already" and "the they" are understandably difficult to grasp, so to spare readers the frustration of Heideggerese (yes, his writing is so esoteric it even has its own name!), we will defer instead to the philosopher Adam Smith (1723–1790), with whom our readers are probably more familiar. Just as Smith performed proto-economics before economics was a field, he arguably did the same with phenomenology.

Before Smith wrote *The Wealth of Nations*, he authored *Theory of Moral Sentiments*, wherein he introduced the concept of the "impartial spectator" (Smith 1817). When judging the actions of others, one must first construct the perspective of an impartial spectator, whose ideas and opinions represent an amalgam of her peers, her culture, her religion... her *Lebenswelt*! Of course, it was hardly novel of Smith to say that culture matters (we can almost hear Herodotus scream, "I said custom was king millennia ago!"). What Husserl and Smith both wanted was for philosophers to take the idea of understanding culture from the personal perspectives of those living within it more seriously; we want the same for agricultural economists.

It is difficult to achieve anything without considering both objective science and the Lebenswelt. Think of an architect designing a church. Objective physics is obviously of paramount importance if the building is to remain structurally sound. Though the design may not explicitly refer to the laws of physics, every design principle from the grade of brick used to the width of the trusses used obeys these laws. Yet this architect also obeys rules set by the Lebenswelt. In some Christian traditions it is believed the church should face east, as it is a socially constructed fact for them that Jesus will return from the east. (When sitting in the pews the congregation faces east; as Matthew 24:27 says, "For as the lightning comes from the east and shines as far as the west, so will be the coming of the Son of Man." Likewise, Jewish temples often face towards Jerusalem, and a Muslim will face Mecca when praying.) To live in a world with others requires one to weave one reality out of the objective world and the Lebenswelt. This is not easy, as those two worlds emanate from different sources and follow different rules. It requires a weaving of realities where beliefs are curated not just according to their objective truth but their coherence with other beliefs, which leads us to the second concept: web of belief.

Web of Belief

Humans construct their *Lebenswelt* by weaving fabrics of truth from their social world, leading us to Quine (1908-2000) and Ullian's (b. 1930) concept, "web of belief" (Quine and Ullian 1978). They argue that any single belief is not only evaluated based on the evidence of that belief, but its coherence with other accepted beliefs. We seek to establish a set of beliefs which are simultaneously in harmony with other beliefs. Some of these beliefs stem from the physical world, and some from the Lebenswelt. This web is socially constructed, but not like an algorithm seeking only accurate predictions of the physical world. The web's goal is to not only understand the physical world but to nurture one's Lebenswelt. For example, a fact accepted by all scientists might be rejected if it interferes with a theology that bestows a person's life with meaning. New information is sometimes integrated into the web like an updating of Bayes' Rule (e.g., there was a 50% chance of rain, but now that dark clouds appear over the horizon, that chance is increased to 70%). Often, though, information is curated to preserve the web. We eagerly accept some information because it is consistent with prior beliefs, despite their lack of validity, and at the same time reject scientific facts because they are not consistent with the Lebenswelt.

For example, a web of belief lending support for organic food will readily assimilate other beliefs consistent with the notion that organic food is "good" and will resist others. It will be skeptical of claims that organic agriculture cannot "feed the world," instead embracing a line from the documentary *Fresh*, which says, "We have the science. We know the answer. And that is, that medium-sized organic is far more productive than any sized industrial agriculture." It will discount arguments that higher yields from industrial

agriculture help preserve natural spaces but will embrace arguments that reduced pesticide use benefits pollinators.

This is not meant as a criticism of organic agriculture. Proponents of industrial agriculture weave their own truths and myths. After all, industrial hog farmers have managed to convince themselves that sows experience high welfare in gestation crates (Norwood and Lusk 2011). This essay is not about who's web is true, but the phenomenological aspects of weaving.

Quine and Ullian's web of belief is not formed in the same way that a scientist forms and verifies theories. Everyday decisions do not employ the scientific method. Science may thrive with such a method, but ordinary life cannot be lived this way. For example, as Yeh et al. (2018) have shown, no scientific study has proven that parachutes save lives when jumping from an aircraft. But when we do jump, it is always with a parachute ... and we all know why!

A better description of how "truth" emerges from the web of belief is provided by the pragmatic philosophers. William James (1842–1910) argues that what we believe to be true is determined by its usefulness, and by the "immediate facts of experience." These "verified ideas" are passed from person to person and generation to generation (James 1907). While science has not proven that parachutes save lives when jumping from airplanes, the idea that it does is quite useful – useful enough that we all believe it to be true.

In the pragmatic school of thought, "truth" takes the form of a construction as opposed to a physical reality. James goes further by describing the adoption of pragmatic truths in much the same way as we adopt fiat currency as a method of exchanging goods and services. Cash only has value if people believe it has value – otherwise it's just a scrap of linen and cotton. Once we all accept it as having value, though, we are immediately cognizant of its usefulness in avoiding the double coincidence of wants. The more we see cash work in our everyday lives, the more its value gets reinforced, and before long nobody even thinks about the existential oddity of being able to trade a small piece of plant fiber for a parakeet. Fiat money is not backed by gold, but it feels like gold when you hold it. Likewise, one's food culture does not feel like the happenstance of historical *Lebenswelt*, even though that is mostly what it is.

Persons weave their web of belief without totally being aware of it, and without being able to deconstruct the web. As Quine and Ullian (1978) remark, "It is much easier to build beliefs and hypotheses than to describe the rationale behind their construction." James understood this decades earlier when he argued that many of our beliefs are passively and subconsciously built. Indeed, Quine and Ullian argue that to expect us to be able to understand how the web was built is like asking us to understand exactly how we can recognize a face—it is asking the impossible. Perhaps inspired by the introduction of cognitive dissonance twelve years prior, they also remark that when the origin of their web of belief cannot be understood, "(persons) embellish a scant story in order to take up the slack" (p. 93).

For example, though you do not know exactly how your brain recognizes a person's face, you can suggest distinctive features of their face that the brain probably uses for identification. Likewise, our friend Grace is unaware that much of her aversion to GMOs is due to the influence of her peers and a lifetime of watching movies where a corporation is almost always the villain. Instead, she "explains" her opposition to GMOs by reciting stories heard from documentaries and social media posts. The "truths" she has adopted will have some objective validity, but their major value is their place in her *Lebenswelt*. These stories become truth for her because they work in her everyday life without her needing to better understand them, just as fiat currency made of cotton and linen represent real value, even though she does not understand why. When we attempt to communicate the true source of our beliefs, we are attempting the impossible. Thus, our justifications and our arguments are made in the absence of, and thus are unconcerned with, objective truth. The philosopher Henry Frankfurt refers to this as "bullshit."

Bullshit

Despite its crude title, Henry Frankfurt's book *On Bullshit* (2005) is a thoughtful exploration of a major part of human life. Frankfurt argues that "bullshit" occurs when someone is unconcerned with truth. He writes, "(that which) bullshit essentially misrepresents is neither the state of affairs to which it refers nor the beliefs of the speaker concerning that state of affairs," as "bullshit need not be false" or deceptive "about the facts or about what he takes the facts to be." A speech replete with bullshit is one where the person does not know the true "state of affairs" (read: truth) or is unconcerned with the true state of affairs when choosing their words. Contrast this with lies, which Frankfurt says occurs when someone "deliberately promulgates a falsehood" in the full understanding of the truth.

If our friend Grace makes a false statement about the dangers of GMOs, she cannot be said to be lying because she cannot really be expected to understand the true dangers GMOs may or may not pose. Grace is not a professional scientist. Conversely, if a corporation has determined from objective scientific experiments that a certain GMO presents a health hazard, but then publicly claims it is safe, that would constitute a lie.

Why would a philosopher concern himself with bullshit? Because, as Frankfurt writes, "One of the salient features of our culture is that there is so much bullshit," (p. 1). We cannot understand our culture without understanding and employing some degree of bullshit. One reason for all this bullshit is that in a liberal and relatively democratic society people are compelled to speak publicly about matters in which they are largely ignorant. The role of a citizen in a democracy is to have "sincere" opinions about everything, he continues, and the greater a person's perceived responsibility to render an opinion about everything, the greater the divide between their "sincere" opinion and reality. The book's denouement (spoiler alert) is that because there is "nothing in theory, and certainly nothing in experience, to support the extraordinary judgment that it is the truth about himself that is the easiest for a person to know," sincerity itself is bullshit.

Sincerity is bullshit? Yes, it sounds like an extraordinary claim, but the argument is compelling. Consider again Grace, who joins protests calling for mandatory labels for foods with GMOs without knowing that almost all produce from GMO plants is already labeled, namely with a 5-digit produce code that starts with the number 8. Her arguments claiming GMOs are dangerous are not based on science, and she is making claims involving the term "DNA" without really knowing what DNA is. The arguments chosen to prove that GMOs are dangerous are not chosen based on objective scientific findings, but on specious evidence that has been proven effective at swaying others against GMOs. Whatever the actual "state of affairs" is regarding GMO and food safety, it is irrelevant to Grace's beliefs, and thus the beliefs she holds so sincerely are bullshit.

What is interesting is that Grace started down the path of food activism out of a deep desire to ensure a safe and sustainable food system. Ostensibly she wants to discover and communicate the truth about genetic modification, but the complexity of the topic prevents her from doing so. Her research on the objective facts about GMOs must be combined with her (i) *Lebenswelt* in her (ii) web of belief, and what she ends up with is (iii) bullshit. This troika is a common experience for people seeking an ethical diet, an experience we refer to as the panoramic fog.

Panoramic Fog

When remarking on the scientific understanding of quantum physics, Niels Bohr once remarked, "Our task is not to penetrate into the essence of things, the meaning of which we don't know anyway, but rather to develop concepts which allow us to talk in a productive way about the phenomena in nature" (Pais 1991, p. 446). It is common for agricultural economists to describe many of Oliver, Mohammad, and Grace's food purchasing patterns as identity expression. When it comes to the complex essence of what it means to be human, identity is a useful one – especially when we are trying to understand consumer food preferences. Marketing today is all about identity expression, and consumers know that the products they buy and the places they shop make a statement about who they are and the lifestyle they purport.

The concept of identity does fulfill Bohr's criteria, but here we propose that in some contexts *panoramic fog* is a more useful concept. But first let us give "identity expression" its due. Forming and expressing an identity is a shortcut to confronting life's dilemmas, allowing one to make choices automatically that should, from a scientific perspective, require considerable research and deliberation (Burke and Stets 2009). Do economists not do the same thing? What Austrian economist carefully researched the 2008 financial crisis before concluding it was caused by excess government involvement in the housing market? What progressive economist did not quickly conclude it was just another consequence of too little regulation? Such shortcuts are not just an easy way out (though they can be), they are embedded in human nature so fundamentally that to question whether they are good or bad is like questioning whether light should move at 299,792 km per second or a little slower.

Being able to tell others that you are an organic enthusiast clearly expresses a cultural identity. In its own way it says a lot about the person's moral and political leanings, and succinctly reflects their desire to know more about where food comes from. However, to get at the heart of this identity, economists must delve deeper into the thoughts, ideas, and experiences that led this person to identify as such. In other words, it behooves us to explore the panoramic fog that has led to this identity, the nuanced combination of this person's *Lebenswelt*, web of belief, and bullshit that allow them to form and defend this identity. In this way, panoramic fog is not a substitute for identity expression – it is its origin, formulation, and sustenance.

This essay began with the hypothetical persons: Oliver, Mohammad, and Grace. All three are good, smart people who want their diet to be laudable. Mohammad wanted his diet to please his god, and for him this was easy because his culture has clear, strict rules articulated in the seventh century on how to achieve this. Oliver and Grace face a more difficult problem, because the issues they are concerned with are new. Synthetic pesticides and recombinant DNA did not exist until recently. Even the scientist who devotes her career to studying these issues is continually learning new things and revising their beliefs. If the scientist grapples with these questions, what are Oliver and Grace to do?

The metaphor of a fog is used because Oliver and Grace embark on their journey with little knowledge of where to begin. They are in a fog. When lost in a fog one must listen carefully for clues as to which direction to take. Almost any sound will do—a running river, cars on a road, the bark of a dog. All lead to some other place outside the fog. How did Oliver end up choosing an organic diet, and Grace a non-GMO diet? It was the siren call they heard first, perhaps by having friends who espoused those beliefs. They could have heard an alternative siren first, perhaps one mocking organic food — one that observes how organic food is the darling of Cuba and Venezuela — two places facing food scarcity and oppressive conditions that few would choose to live under. Maslow's hierarchy of needs does not require a certain type of food, just food. Oliver and Grace might be equally happy consuming conventional foods and finding another cause (*e.g.*, food insecurity) to champion.

It is comforting to find others in the fog. While Oliver cannot see more than five feet away, he can see a person one foot away. Like Oliver, others who have heard the organic siren call are heading in the same direction as him, and Oliver is likely to bump into them. They will almost certainly stick together as they try to escape the fog, and it is unlikely anyone will suggest they try a different direction, for the siren grows ever louder through their collective repetition of its message, and its promise that they will all soon escape the fog. They stick close to one another because that is the only way they can see each other in the fog. Similarly, persons of similar beliefs use a variety of symbols to recognize each other in society, like sporting shopping bags and t-shirts with pro-organic messages.

At some point Oliver and his group will manage to convince themselves that they are not even in a fog. Combining a zeal for cosmic harmony with uncertainty about how to achieve it produces considerable anxiety. A recurring theme in modern psychology is individuals taking actions to reduce anxieties. In Identity Theory (the psychology version) the individual monitors and adjusts their behavior to reconcile it with the identity they wish to express (Burke and Stets 2009). Surrounding oneself with like-minded people and curating information to reinforce prior beliefs is also a strategy for reducing anxiety.

As such, Oliver and his group develop a sense of certainty about the benefits of organic food because the benefits are so uncertain. They will reassure each other that the siren is becoming louder, and that they are walking in the right direction. They will place bumper stickers on their cars promoting organic, local food. They will form organizations whose purpose is to seek evidence promoting such food. They will make FOIA requests for the e-mails of professors who criticize organic foods to prove that those professors have a relationship with "big ag."

(Elsewhere Oliver's doppelganger is attending Farm Bureau conferences, where members are assured that Farm Bureau is intensely lobbying politicians to keep pesticide regulations loose, championing documentaries like Food Evolution, and driving automobiles with the bumper sticker "Farmers: the original environmentalists.")

As Oliver and his clique move ever closer to the siren of organic advocacy, other sirens get softer. It becomes increasingly apparent they are on the right path, and if they encounter others along the way they encourage them to follow. There is no way for Oliver to know what would have happened if he started at a different place in the fog, or if he ventured off in a different direction.

What Oliver does not realize is that along the way, he spent so much time convincing himself that his way out of the fog was best that he forgot to listen for other sirens.

Perhaps he started nearby to Jane, who followed a different path out of the fog. Should they meet again they can discuss their journeys, but their different paths create a separation that is hard to reconcile. Perhaps Oliver remarks that he is glad he consumes food without pesticides. Jane then notes that organic farmers do use pesticides, just not synthetic ones. Oliver then retorts that organic food has fewer pesticide residues, and Jane responds that residues of both organic and nonorganic food are far below the levels that can cause harm. "The levels established by the EPA, run by the corrupt Scott Pruitt?" Oliver counters. Jane insists the EPA was too strict too begin with, and that Pruitt was just setting things right. Both are informed, both are intelligent, both are perhaps right, and the duel is a draw.

In reality, the discussion is unlikely to be so informed. Chances are that they will merely acknowledge their different preferences for food as if they are different species with different nutritional requirements. If they do attempt a debate, it will likely be — as Frankfurt would say — bullshit. Each understands so little about the truth of their own path they cannot possibly reflect reality. These are not lies, Frankfurt would say, because they do not know and thus cannot reflect truth. All they can do is bullshit.

Elsewhere in the world are agricultural economists tasked with understanding why Oliver and Jane made different choices. They run nonhypothetical choice experiments and conduct surveys using Likert scales to measure attitudes. The differences between Oliver and Jane are then explained with random parameter logit models. That, too, is bullshit.

References

- Bell, E., F. B. Norwood, and J.L. Lusk. 2017. Are Consumers Willfully Ignorant about Animal Welfare? *Animal Welfare* 26: 399–402.
- Burke, P.J., and J.E. Stets. 2009. Identity Theory. New York: Oxford University Press.
- Burton, R.A. 2009. On Being Certain. New York: Griffin Publishers.
- Chalmers, D.J. 1995. Facing Up to the Problem of Consciousness. *Journal of Consciousness Studies* 2(3): 200–219.
- Chang, J.B., J.L. Lusk, and F. B. Norwood. 2010. The Price of Happy Hens: A Hedonic Analysis of Retail Egg Prices. *Journal of Agricultural and Resource Economics* 35(3): 406–423.
- Durant, W. 1935. *The Story of Civilization: The Age of Faith*. New York: Simon and Schuster.
- Frankfurt, H.G. 2005. On Bullshit. Princeton, NJ: Princeton University Press.
- Heidegger, M. 1962. Being and Time. New York: Harper & Row.
- Husserl, E. 1954. The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy. Evanston, IL: Northwestern University Press.
- James, W. 1907. Pragmatism's Conception of Truth. *The Journal of Philosophy, Psychology and Scientific Methods* 4(6): 141–155.
- Miller, R. D. II. 2019. Lecture 9: Leviticus at a Crossroads. Understanding the Old Testament. The Teaching Company.

- Nietzsche, F. 2003. *Beyond Good and Evil*. New York: Penguin Classics Citations refer to the Penguin edition.
- Norwood, F.B., and J.L. Lusk. 2011. Compassion by the Pound: The Economics of Farm Animal Welfare. New York: Oxford University Press.
- Oberholtzer, L., C. Dimitri, and C. Greene. 2005. Price Premiums Hold on as U.S. Organic Produce Market Expands. *Vegetables and Pulses Outlook* VGS-30801.
- Pais, A. 1991. *Niels Bohr's Times, in Physics, Philosophy, and Polity*. Clarendon, UK: Oxford University Press.
- Quine, W.V., and J.S. Ullian. 1978. *The Web of Belief*, Second ed. New York: McGraw-Hill, Inc.
- Scruton, R. 2014. The Soul of the World. Princeton, NJ: Princeton University Press.
- Seabright, P. 2004. In the Company of Strangers. Princeton, NJ: Princeton University Press.
- Smith, A. 1817. *The Theory of Moral Sentiments*. Boston, MA: Wells and Lilly. (Original work published 1759).
- Soler, J. 1996. Biblical Reasons: The Dietary Rules of the Ancient Hebrews. In *Food: A Culinary History from Antiquity to the Present*, ed. L. Kritzman, 59–83. New York: Columbia University Press.
- Weber, J.G. 2011. How Much More Do Growers Receive for Fair Trade-Organic Coffee? *Food Policy* 36(5): 678–685.
- Yeh, R.W., L.R. Valsdotirr, M.W. Hey, C. Shen, D.B. Kramer, J.B. Strom, E. A. Secemsky, et al. 2018. Parachute Use to Prevent Death and Major Trauma When Jumping from Aircraft: Randomized Controlled Trial. *BMJ* 363: k5094.