

Foster Whitney

GDVX 701

Shumate

May 16, 2023

Cooking is ARTificial

“Ferran Adria did not invent molecular cooking, I did.” For a foodie, this is an unimaginably sacrilegious statement. Those in the know however, can attest to the fact that one man is globally seen as the subject matter expert, and can make this bold statement. That man, chemist Hervé This, introduced the “field of scientific activity” of molecular gastronomy in 1988. **Since the late 1980s, chefs have appropriated the ideas developed by food scientists to generate the elements of magic and surprise typified in today’s global modern cuisine.**

In the eyes of the scientific community, molecular gastronomy is a field of science the same as chemistry and physics. These “sciences of nature” seek to explain the “mechanisms of phenomena” in our world. (This) Sure, many people before the late ‘80s wondered why an apricot tastes more sour when cooked than raw, but Hervé This decided early on in his career to tackle questions like this, and to make food the primary focus of his scientific studies. In the curious case of the apricot however, even science has yet to provide an explanation for this acrid phenomenon. From a scientific point of view, This observed that pH levels of raw and cooked apricots are the same, so they should taste the same, and yet the flavor profiles are what they are. Scientific phenomena like these are the elemental building blocks of the appropriated “magic” of modern cuisine. Each scientific discovery is revolutionary in its own way, and when applied to the modern plate, brings something unique and exciting.

When referring to those who effectively practice molecular cooking, the moniker of *avant-garde chef* is commonly applied. One of the most influential players in modernist cuisine, Albert Adriá has strong opinions regarding this designation: “If you always think that one plus one is two, you will never do anything different. Those who think that one plus one is three are the ones who dare. They are the brave ones. They are the avant-garde.” (Netflix) To this end, avant-garde has become synonymous with novelty and excitement in popular modern cuisine. What is avant-garde or exciting though, is the way in which ingredients wind up on a plate, not the ingredients themselves.

But at what point has the chef gone too far? At what point does the food become “too elitist or virtual?” (O’Connell) Just as Hervé This postulated in a public lecture in 2018, “all cooking is artificial,” because once an animal or vegetable has been removed from their natural environment with the express destination of the plate, they’re an ingredient, and no longer a fish, a chicken, or a carrot. In the eyes of science, the ingredient is unnatural, but in the eyes of a chef, it’s *organic*. The fact of the matter is, ingredients have a life cycle of their very own.

Once the animal (or plant) dies, it becomes an ingredient, or food for a human. When a human is done consuming the ingredient, the remains enter an entirely new stage of life cycle that is beautiful in its own grotesque way. These ingredients instantly become carcasses, and they begin to feed an entirely different kind of creature through their rot. One man’s trash is another man’s treasure so to speak, and flies delight in chicken’s flavor, just as the humans did. With this life cycle in mind, there really is no difference in what is served as a meal, or the experiential way in which it is served. Ultimately, the flies always descend.

Hervé This has developed substitute ingredients with identical molecular structures to these “natural” ones, which can easily be created in a lab. As a society, we could vastly reduce the

impact we have on the environment by embracing these man made ingredients. Ironically, as successful as molecular cooking has been in terms of special occasion excitement, the general public cannot seem to get behind the concept of growing day-to-day ingredients in test tubes. The general preference instead seems to be the acceptance of environmental degradation from large scale farming practices, in place of eating “science meat” which is, down to its molecular level, exactly the same as an allegedly all beef hamburger patty from McDonalds. Even some of the most influential spokespeople of the culinary world have trouble accepting This’ framework of “note-by-note” cooking with lab-engineered ingredients. In the words of infamous chef Anthony Bourdain: “It doesn’t sound like anything I would be in the mood for... but when you complain [as a chef], you’re like my grandparents complaining about the electric guitar.”

(Connelly)

Whereas scientific observations of certain phenomena focus on the quantitative (like pH balance, temperature, or sugar content), culinary observations focus on the qualitative (like happiness, nostalgia, or excitement). To achieve these qualitative results in their field, avant-garde chefs apply the quantitatively-developed techniques and technologies of science (e.g., smoke, air, foam, illusion, or even the emerging concept of “hidden” food) to give their diners a “magical” experience past the plate. These novel experiences are now what diners worldwide seek as a form of entertainment, and with every food photo posted to social media, the cycle of torment for these innovative chefs endures. When forced to create a lasting experience over delicious food, the chef loses all control, even all judgment.

Although this road to culinary perdition is the result of a litany of circumstances, the advent of Instagram is arguably the most damning of them all. What was originally designed as a platform for bourbon connoisseurs to share their favorite booze, Brbn, evolved into the culinary

exploratory world that is the Instagram of today. Dishes are now designed to maximize photo or video effect for social media, with taste being far less of a priority than ever before. The answer to the question of “does this need a sauce” now depends on the final photo the chef wants for what is ironically called their “feed.” What is being “fed,” however, is just as much of an illusion, just as unnatural as the ingredients themselves are. This means that avant-garde and innovation cannot last forever.

The discovery of something new can cause even the most decorated of chefs like Albert Adrià to “tremble and sweat,” just as he did upon discovering that olive oil could be spherified with alginate, and then melt in the 98.6 degree humidity of the diner’s mouth. No matter how novel the discovery, the ultimate question is always “where’s the limit?” (Netflix) Chefs fight this battle every day; even the most famous avant-garde chefs cannot continue to create and innovate. The cycle eventually ends, explosively. “The airs. The pancake. The sugar lamp. We didn’t stop making things that made no sense. I felt free. I was always plugged in. New techniques. New concepts.” And finally, even a chef like Adrià reaches the moment where “We have created a monster,” and it’s time to close, and start again.

When El Bulli closed, Albert Adrià took time to find himself in the post-apocalyptic collapse of the modern culinary icon. “I wanted to remove all my arsenal of techniques. And I wanted to focus on the concept of fun.” Upon the opening of his next restaurant Tickets, Adrià was thrown deeper into anxiety when diners found his new recipes to be completely lackluster, boring even. After spending weeks struggling to find the key to his new concept’s success, Albert came to the conclusion that the missing element in his new restaurant was the diner-perceived magic. “I love magic. To be a magician, you have to be bold, and I am bold. Magic is an illusion. And we want to convey that illusion at *Tickets*.” Once the magic was back,

so was the success, but for how long this time is questionable. Just as a roast chicken dinner inevitably becomes food for flies when the humans are done with it, molecular gastronomy may finally be dead, just as the critics predicted.

Bibliography & Works Cited

- *YouTube*, YouTube, 25 July 2018, <https://www.youtube.com/watch?v=sPjoFy6RTBw>. Accessed 18 May 2023.
- This, Hervé, and Malcolm DeBevoise. *Building a Meal: From Molecular Gastronomy to Culinary Constructivism*. Columbia University Press, New York, 2009, doi:10.7312/this14466.
- “Chef’s Table.” Volume 5, Episode 4, Albert Adriá, Netflix.
- O’Connell, Libby Haight. “Bite 103 – Molecularly Modified Foods.” *The American Plate: A Culinary History in 100 Bites*, Sourcebooks, Naperville, IL, 2015, pp. 297–300.
- Bosker, Bianca. “The Test-Tube Chef: Herve this, the Father of Molecular Gastronomy, Thinks the Meals of the Future should be Constructed from Chemical Compounds.” *The Atlantic Monthly* (1993), vol. 316, no. 2, 2015, pp. 16.
- Gold, Jonathan. “Why Molecular Gastronomy must Die: And 9 Other Food Trends I Hate.” *Sunset* (Menlo Park, Calif.), vol. 227, no. 1, 2011, pp. 42.
- Graff, James. “The 2004 TIME 100.” *Time*, 26 Apr. 2004, content.time.com/time/specials/packages/article/0,28804,1970858_1970890_1971358,00.html.
- “From Chemistry Labs to The Kitchen: Molecular Gastronomy.” *USC Viterbi School of Engineering*, 11 Nov. 2017, illumin.usc.edu/from-chemistry-labs-to-the-kitchen-molecular-gastronomy.
- Madrid, Lisa Abend /. “Debating the Merits of Molecular Gastronomy.” *Time*, 23 Jan. 2009, content.time.com/time/arts/article/0,8599,1873579,00.html.

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- OlehSlepchenko, director. *iStock*, <https://www.istockphoto.com/video/swarm-of-mosquitoes-flying-in-the-summer-a-lot-of-mosquitoes-flying-insects-buzzing-gm820360776-134209909#>. Accessed 24 May 2023.