Food Futures: Histories of Anticipation, Technology, and Culinary Imaginaries of Future Foodstuffs

Anna Heitger

Future Food Scripts: An Ethnographic Approach to Practices of Eating and Anticipating in Germany

Food and food security have become urgent global political and ecological issues in the Anthropocene, giving rise to various (techno-utopian) projects set out to intervene in and design the future of food and the ways in which we engage with food by growing, acquiring, preparing, eating and digesting it. My ethnographic research on food and eating practices in Germany is part of the research project "Food4Future" that aims at developing new technologies for food production and future foodstuffs. With the concept of anticipation (Adams et al. 2009) I try to capture how the possibility of future is pervasive in practices of food design and how this biopolitical form of preparedness for an uncertain future legitimises interventions, embedded in wider epistemic and biopolitical projects, in the present. The project attempts to find ways to conceptualize the particularmultispeciessubjectivities and altered difference configurations emergent within these anticipatory projects.

My proposal is to understand food as a scripted technology (Akrich 1992) to analyse how the incorporation of novel substances with novel characteristics and potentialities evokes a new subject and a new, altered and already futuristic body. What I seek to discuss is 1) what is at stake when we as multispecies organisms shaped by food from the social and cultural to the molecular level literally "eat the script" of designed foods, 2) how to prepare for different kinds of anticipations, 3) how to re-contextualize these anticipatory projects in the history of food and eating, and in ethnographies of food and eating of the present.

Carolyn Taratko

Food Futures: Engineering the Perfect Protein Source in Interwar Germany

This paper focuses on the energetic research undertaken after World War I to create a reliable domestic food supply in Germany. Physiologists, agricultural scientists, and political economists promoted the view that technological progress in agriculture and food manufacturing would ensure growing yields, gradually replacing products from overseas to provide a rich, varied, and domestically available diet. These hopes were animated by the pursuit of surrogacy projects, which involved the replacement of certain foods and reorientation of consumer preferences. Surrogates encompassed both ends of the spectrum: the calls to tap into traditional knowledge, for example, by collecting chestnuts and foraging for wild vegetables, and at the other pole attempts to mechanically, chemically, and finally biologically "debitter" lupines for human consumption, which forms a case study at the core of this paper.

In it, I explore projects to secure home-grown, plant-based protein in Germany in the wake of World War I by looking at experiments in lupine cultivation and processing to render the

plant suitable for human (and animal) consumption in the 1920s and 30s. Lupines had long been touted as a sort of miracle food, a high-yield plant well-suited to the sandy soil found in much of northeastern Germany, with seeds rich in protein. Proponents of both selective breeding techniques and technical refinement attempted to transform the cheap, protein-rich seeds into a staple suitable for the German diet. Experiments were conducted in farms, in the processing facilities of enterprising manufacturers, and finally at the Kaiser Wilhelm Institute for Plant Breeding. In both private and state-sponsored contexts, the improvement of lupines was taken up with great enthusiasm as a surrogacy project. Treating surrogate foods as a technology allows us to understand them as part of this wider landscape of technological expectations and highlights the underlying assumption that progress in science and industry could overcome scarcity in early twentieth-century Germany.

Alwin J. Cubasch

Freeze Dried Futures: NASA's Quest for Edible Spin Offs in Rural Texas.

Imagined futures in the 20th century have heavily relied on the imaginative surplus generated by new technologies. The advent of manned spaceflight, for example, fueled many contemporary fantasies. Life on the moon seemed just around the corner, and so did the experience of dining in zero-g. But while space colonies have proven to be elusive, the question of the impact of space exploration technology on American cuisine remains. After all, NASA had developed completely new foods for space and swiftly came under pressure to spin off these space innovations into consumer goods to retroactively justify tax expenses.

This paper argues with archival sources from NASA’s Manned Space Center in Houston that NASA’s space food Spin Offs failed to tap into the imaginary potential that its space technologies provided. The “Meal System for the Elderly”-Spin Off that was planned by NASA's Food & Nutrition Branch in 1975/76 reveals the problems which NASA encountered on its way to the commercial astronautization of everyday life. The goal of the program was to provide retirees living in rural areas of Texas with easy-to-prepare, freeze-dried space food rations that would keep for a long time without cooling and could be cooked just with the addition of water. The goal was to close existing social care gaps in rural areas. After an initial field trial, however, the program ended without mass application. Public voices perceived the project as technocratic overreach. Consumer behavior did not align well with NASA’s expectations. Expensive production and limited market opportunities made NASA foods largely unattractive to commercial providers.

Tracing one story of how the future of food that NASA’s scientists anticipated came in conflict with culinary reality, this paper offers a cautionary perspective on a failed innovation in the history of food technology that helps to understand how novel food technologies can fail despite considerable effort, proximity to cutting edge technology, and imaginative power.