Ann Campbell- DZTA 2019 Vision

Living Fossils: Exploring the Ancient Origins of Cheesemaking in the Mediterranean

It is the year 2022. Cheese is a valued, global commodity, and part of the worldwide tradition of fermented foods. From a growing market for DOP cheeses in east Asia, to new styles emerging in Latin America, cheesemaking has networked its ancient roots to be celebrated worldwide. Cutting-edge mongers continue to experiment with new flavors, embracing the relationship cheese has to other fermented foods that appear distantly related, and specialty grocers have taken an interest in an expanded notion of the Mediterranean, embracing the north African and west Asian ancestry inherited by traditional European foods, including, not least of which, cheese.

I envision the heart of the DZTA mission as connecting the New World cheese community with its ancestry in traditional European cheesemaking. This reinforcement that New World cheese styles, even the most derived and novel, become artifacts of the Old World cheese styles from which they descend excites me with its fundamental inclusion of history, geography, and genealogy. For my submission to the 2019 DZTA Committee, I wish to widen the scope of what we mean by European origins through an exploration of the ancient origins of cheesemaking. Here I consider not only the deeper ancestry of New world cheese styles in Old world styles, but the origins of the Old World styles themselves.

Evolutionary biologists sometimes evoke the notion of a "living fossil." First presented by Charles Darwin (1859) in *The Origin of Species*, living fossils are extant species that maintain the characteristics of their ancient ancestors, yet thrive on Earth today as modern organisms, and are valuable to biologists to investigate the history of life. I intend to explore the history of ancient cheesemaking by understanding three different cheeses I consider to be "living fossils." These cheeses are produced, marketed, and consumed today, but represent some of the oldest known styles of cheese. Their production zones are situated in the Mediterranean, where we can understand the diffusion of cheesemaking as a technology not only within Europe, but by expanding our notion of where cheese is made, or originated, to include western Asian and northern Africa.

It is known that a some foodlore of southern Europe attempts to obscure the influence of Africa and Asia, though historical, archaeological, and genetic data tell a story of profound contribution from these regions (Wright, 1999; Pignone and Sonante, 2004). My DZTA vision takes me to three points of diffusion for southern Europe: Egypt, the Greek islands, and Sicily. These locations are known as points of cultural and biogeographical exchange for agricultural technologies and cheesemaking (Kindstedt, 2012; Wright 1999). Although I do not attempt to draw a direct line of ancestry from a single ancient cheese to any given derived cheese, the exploration of these ancient, Mediterranean styles that remain in current production has the capacity to reveal the ancient origins of cheesemaking, and how these ancient styles manifest in other styles from further North in Europe, to the global cheese market of today. For each of the three cheese styles and locations, I intend to visit a production facility to observe the cheesemaking process in a historical and geographic context and will collect data as participant-observer. Additionally, I will conduct interviews with individuals involved in the production and marketing of these cheeses concerning the historical and cultural significance of their product. Interview guides will be produced in advance, and I will request formal permission from all individuals I intend to interview.

My exploration begins in Egypt, in the town of Damietta, where I will explore an iconic Egyptian cheese named for the town. Understanding Damietta and the people who produce and consume this cheese brings northern Africa into our traditional zone of cheesemaking. The prevalence of pastoralism and fermented foods in Africa likely has a connection to the cheesemaking traditions of southern Europe, though this is rarely included in the stories we know and repeat (Katz, 2013; Shephard, 2006). Through Damietta I will explore not only how these traditions and technologies diffuse northward, but how derived cheesemaking techniques potentially diffuse back into Egypt from Greece and Italy.

Next, I will travel to the Greek island of Lesbos, to the village of Agra to observe the production of Essex Feta. This PDO cheese represents an ancient style of brined sheep's milk cheese, perhaps one of the first cheese styles to be

widely traded in the Mediterranean (Kindstedt, 2012). As feta is an ancient style that has achieved global appreciation, I will explore how its producers perceive their cheese as both the origin and destination of a global cheese market. I also wish to gain a greater understanding of the role of brining as an ancient technology of preservation and trade, as it is infrequently employed in contemporary cheese styles.

I will complete my journey in Sicily, an island known to be a stepping-stone for cultural exchange, particularly of agricultural technologies, between north Africa and mainland Europe (Wright, 1999). Here I will explore the production of an iconic provolone style, Caciocavallo Ragusano, at the CoRFiLaC research facility. The production of Ragusano represents a study of archaeology, through a preservation of this ancient Sicilian recipe and technique, but also in cheese science, as CoRFiLaC utilizes Ragusano as a model in research of microbial domestication, sensory profiling, and other contemporary studies of dairy science. Here, I will discuss with researchers and cheesemakers why they view an ancient style as most appropriate to model cheese science, why they believe the preservation of ancient styles has value, and the role of Sicily as a diffusion point between Southern Europe and the rest of the Old World. In Sicily, I hope to explore ancient Arab foodways that have become part of a European cultures.

My background and education in history and social sciences bring qualifications to pursue this vision. My skills in historical archival research will facilitate a strong preparation for my field excursions, grounding my understanding of the history of cheesemaking as a technology in the history of science. Additionally, my experience with social sciences research methods such as ethnography and participant observation will ensure that my experiences while visiting these locations will extract real data to create an information rich teaching session upon my return. When I deliver my research to the American cheese community, I hope to convey that cheesemaking is an ancient technology, inherited through cultural exchange across geographic regions, and can be explored through the styles that are produced today. I hope that cheesemongers employ the notion of "living fossil" to think about ancient and ancestral cheese styles from all regions. I hope to encourage cheesemakers to consider the ancestry of their own styles, whether intended or not. As we expand our notion of the contemporary cheese market and production zone to a global scale, I hope that we may likewise consider the origins of cheesemaking, pastoralism, and fermentation as a story of global history, as well.

It is the year 2022. The Daphne Zepos Teaching Award is sending innovative cheese professional to Japan and Brazil, India and Sudan, to explore the global cheese market and ancient trade routes at once. Stories of European products mongered from behind the counter at cheese shops across the United States are spun with stories from around the globe, telling the ancestry of cheese, and presenting our contemporary cheese styles as an artifact of an ancient and global history.

Bibliography

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