

Feeding Cahokia: Early Agriculture in the North American Heartland. By Gayle J. Fritz. 2019. The University of Alabama Press, Tuscaloosa. 228 pp.

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Received August 10, 2024

Accepted November 4, 2024

Published December 28, 2024

OPEN ACCESS

DOI 10.14237/ebl.15.1.2024.1897

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In her introduction, Fritz states three goals for the book: to “highlight the biologically diverse agricultural system” in place at Cahokia during the early second millennium AD and its development; to “examine the possible roles played by farmers” across the social hierarchy in producing and preparing food; and to present the archaeological evidence for agriculture and subsistence at Cahokia in a “comprehensible and... interesting” manner for the general public (p. 4–5). Here I share my perspectives mainly on her third goal and highlight the pedagogical value of excerpts from this book as a deep learning tool for college students, and as a source of inspiration for developing paleoethnobotanical exercises in college courses.

In the spring of 2024, I taught a seminar for upper-level undergraduates and graduate students that studied ancient systems of food production and acquisition in urban societies across the globe (e.g., plant cultivation, animal raising, and direct and indirect access through distribution and exchange systems). Of the ten enrolled students, half were majoring or minoring in archaeology, while others were majoring in sociology, engineering, history, economics, and international relations. In other words, they offered a range of perspectives to understand the topics at hand and had varied levels of archaeological training.

I found this book to be an ideal teaching tool because Fritz synthesizes research on food production at a major ancient North American city and contextualizes her analyses with well-written background that acts as a primer and introduction for learners new to the Woodland and Mississippian

worlds. Throughout the book Fritz’s voice is clear and direct, and her writing style centers the ancient Cahokians as the subject, rather than the quantitative archaeological data. One example where this stands out is in her discussion of shifting landuse around Cahokia during the Emergent Mississippian era. Rather than passively stating that palynological and archaeological evidence of agricultural systems indicate that uplands were likely to wooded and in need of clearing for maize [*Zea mays*] agriculture, Fritz makes a powerful and intentional shift in subjects. She writes from the perspective of the farmers, suggesting their reaction when they encountered these tall trees (p. 132):

Because native species of trees can grow to impressive heights in this area within a human life span, the first generation of farmers returning to a wooded upland tract that has not been cleared or otherwise managed by frequent burning for several decades might well have had to undertake some serious tree removal.

In this sentence Fritz focuses our reading on a relatable human timescale (in contrast to the naturally abstract archaeological time periods), situates the farmers’ perspective within a brief environmental history of a specific landscape, and paints a poignantly possible moment in the past.

I assigned Chapter 10 (“How to Feed Cahokia: Cultivating Fields and Social Relationships”) as a reading because it contains Fritz’s examination of the *practices* and *decisions* of Cahokia’s farmers—the way that the agricultural system functioned—by

connecting archaeological data with social concepts (p. 129). Her goal of the chapter aligned with the goal of the course: understanding the social and economic conditions that influenced what food people ate and how it was produced and prepared. Additionally, its content and style made it an appropriately interpretive reading for the final case study of the semester.

In Chapter 10, Fritz covers topics central to studies of agricultural systems: population estimates, what/when/where to grow, what to do with surplus, and the social and ideological systems that created “community-level cooperation and spiritual support” needed for successful agricultural production (p. 150). In this chapter, as throughout the book, she emphasizes that “it is important to keep in mind the larger landscape when considering Cahokia’s economy” because farmers in outer settlements produced food used for events in the civic-ceremonial center (p. 130). She also includes “a summary of old and new views about how the Cahokian system might have functioned” (p. 131), providing the scholarly context and framework for the current interpretations. In doing so, Fritz deftly combines variable and sometimes conflicting perspectives into a coherent

narrative of study about a sophisticated, cooperative, ancient farming society. While these successes of the chapter are more evident to people familiar with research in the Mississippian world and in food systems, it was Fritz’s exploration of the temporal and spatial aspects of planting crops and managing and accessing fields that resonated with the students.

Twelve out of the 22 pages of this chapter are dedicated to descriptions of sleeping Eastern Complex crops (maygrass [*Phalaris caroliniana*], little barley [*Hordeum pusillum*], erect knotweed [*Polygonum erectum*], chenopod [*Chenopodium* spp.]) and the ever-popular maize, squash [*Cucurbita* spp.], and sunflower [*Helianthus annuus*], and their possible planting patterns (p. 136). The discussion of these tangible characteristics is further brought to life by the illustrations of possible “adaptive garden layouts” of small early Cahokian fields along watery edges (Figure 10.2) and on elevated dry land (Figure 10.3), both of which “take into account proportions of plant remains found in the archaeological record” (p. 137–138). Students noticeably perked up during our discussion of these garden plots, and they used these figures as tools to move their discussion from semi-abstracted plant

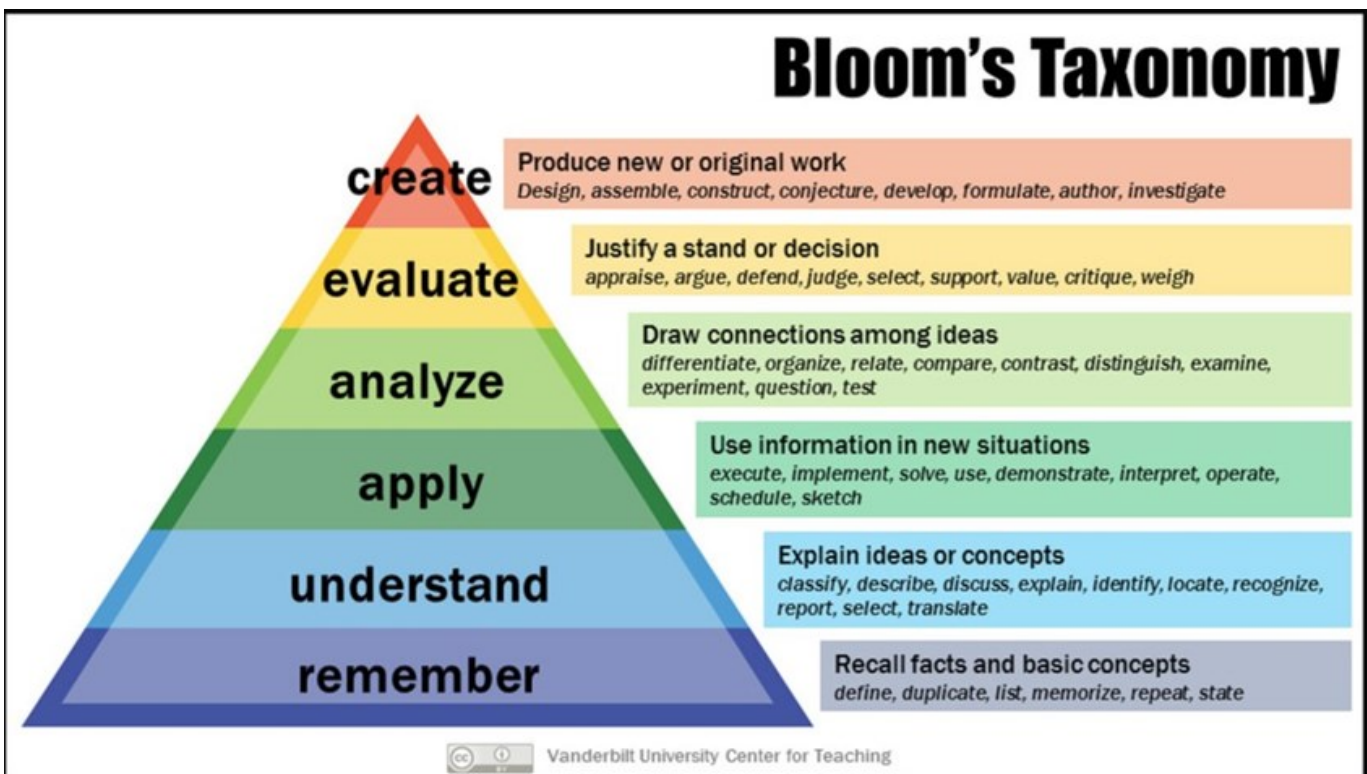


Figure 1 Bloom’s Taxonomy (after Armstrong 2010).



remains to actual *plants*, and finally to a *place* of where people cultivated plants with careful consideration of seasonality and growing requirements balanced with availability of cultivable lands. Such a conceptual shift, understanding data in a new framework, is a demonstration of deep learning (McGregor 2020).

By interweaving multiple lines of evidence through this book, Fritz creates a culmination of research at Cahokia that parallels the culmination of archaeological inquiry these students developed throughout the course that tracks along Bloom's Taxonomy (Figure 1). Through our discussion of food systems across ancient cities, students demonstrated their growth of comprehension along these steps, moving from remembering and understanding the evidence of food provisioning in these various societies. Specifically in our study of Cahokia, this chapter helped them to move further up the pyramid of learning to apply, analyze, and evaluate the various lines of archaeological, historical, and ethnographic evidence presented to draw connections among ideas (Armstrong 2010).

The effectiveness of the field illustrations as deep learning tools inspired me to develop an exercise for

future iterations of this course. By having students draw their own possible layouts, they will learn to apply information about the types of archaeological plant remains found, the ecological and seasonal requirements of the plants, and data about the natural environment. This exercise can be applied to any other agricultural case study, and as students evaluate this data to create possible field layouts, they will develop skills and abilities and achieve deep learning at the highest tiers of Bloom's Taxonomy. In short, Fritz leaves readers with vivid reconstructions of life and landscape at Cahokia based on decades of scholarship that are thoughtfully marshalled into her current interpretation.

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