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Archaeology and gastronomy: Uncovering the historical roots of food security in cultural heritage tourism

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Abstract

This research is intended to use archaeology and gastronomy to understand the historical origins of food security in historical heritage tourism. By looking at ancient foods and their modern applications, we want to bring out how those foods can help drive modern food security. The study employs qualitative interviews with archaeologists and food historians and quantitative questionnaires distributed to tourists engaged in cultural heritage activities. NVivo software was used to analyze qualitative data, while SPSS was used to analyze quantitative data. This study shows an excellent fit between older food habits and recent food security beliefs among travelers. The research also discovers a few of the most significant archaeological sites, which serve as attractions for gastronomic tourism, facilitating visitors' attraction and information. The article suggests that cultural heritage tourism enhanced through archaeological knowledge in gastronomy can also add to sustainable food security programs. This study can be applied in cultural heritage management, food security policy, tourism planning, and implementation to create a better visitor experience and sustainable living. The novelty of this research is in the connection of archaeological knowledge to modern food security concerns in a manner that challenges the understanding currently held by archaeology and gastronomy.

Keywords: archaeology, cultural heritage tourism, food security, food practices, gastronomy, historical food practices, sustainable practices



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Public Interest Statement

This research takes a closer look at the fascinating relationship between archaeology and gastronomy, showing how the foods of our ancestors can help us tackle today's food security challenges within the realm of cultural heritage tourism. Studying past culinary traditions stresses their importance for today's sustainable practices and food security efforts. This study aims to bridge a significant gap in existing reports by connecting archaeological insights with the pressing food issues we face today. Our objective is to draw attention to the ways in which these practices may benefit local communities and the travel experience, promoting a more meaningful and sustainable approach to cultural heritage.

Introduction

Food is an integral part of culture and has existed alongside humanity throughout history. As societies evolved, so did their food systems, influenced by environmental, social, and economic factors. Today, the intersection of archaeology and gastronomy offers a unique lens through which we can examine the historical roots of food security, particularly in the context of cultural heritage tourism. Cultural heritage tourism has gained prominence as a means of preserving and promoting local traditions, including culinary practices. Tourists increasingly seek authentic experiences that connect them to the history and culture of a destination. This trend raises important questions about how historical food practices can inform contemporary food security strategies and enhance the tourism experience. According to the United Nations World Tourism Organization (UNWTO), cultural tourism accounts for approximately 40% of global tourism, highlighting the significance of cultural heritage in attracting visitors (UNWTO, 2022).

The motivation for this research stems from the need to bridge the gap between archaeological findings and modern food practices. Understanding how ancient societies approached food security can glean practical lessons applicable to today's challenges. This study explores the historical roots of food security through archaeology and gastronomy, contributing to discussions on sustainable practices in cultural heritage tourism. Previous studies have highlighted the importance of food in cultural identity and heritage (Labadi et al., 2021; Almerico, 2014). However, there remains a lack of comprehensive research that explicitly connects archaeological insights with contemporary food security issues. The authors of this article seek to fill that gap by examining how historical food practices can inform modern strategies for ensuring food security, particularly in the context of tourism.

This research posits that historical food practices, as revealed through archaeological studies, can significantly enhance contemporary food security strategies when integrated into cultural heritage tourism. Specifically, it is hypothesized that:

- **H1:** Tourists who engage with historical food practices during cultural heritage tourism experiences will demonstrate a greater understanding of food security issues and a stronger commitment to sustainable food practices.
- **H2:** The incorporation of archaeological knowledge about ancient food systems into tourism offerings will lead to increased visitor satisfaction and engagement, thereby promoting sustainable tourism practices.

The relevance of this study is underscored by the growing global concern over food security, exacerbated by climate change, population growth, and economic disparities. According to the Food and Agriculture Organization (FAO), nearly 690 million people were undernourished in 2019, a number that has likely increased due to the COVID-19 pandemic (FAO, IFAD, UNICEF, WFP and WHO, 2020). As nations strive to achieve the United Nations Sustainable Development Goal 2 (Zero Hunger), understanding historical food systems can provide innovative solutions to modern challenges. Integrating gastronomy into cultural heritage tourism enhances the visitor experience, supports local economies, and promotes the

preservation of traditional food practices. Since travelers frequently spend more money on food-related activities than other parts of their vacations, research suggests that culinary tourism can boost the economic advantages to local communities. (Gregana & Ylagan, 2024). By harnessing archaeological insights into ancient food systems, this study proposes a compelling framework for sustainable tourism practices that promises to enhance visitors' experience while benefiting local communities. Hence, this article is going to illuminate the connections between archaeology, gastronomy, and food security within the context of cultural heritage tourism. We analyze historical food practices and their modern applications to help create sustainable food security strategies that meet today's and future needs.

Literature Review

The literature on archaeology and gastronomy is rich and varied, encompassing a range of disciplines including anthropology, history, and culinary studies. Recent research has emphasized the role of food in shaping cultural identities and the importance of preserving traditional food practices (Ranta & Ichij, 2022; Aktaş-Polat & Polat, 2020). Archaeological studies have uncovered evidence of ancient agricultural practices, trade networks, and dietary habits, providing a foundation for understanding the evolution of food systems (Reed, 2021). Archaeological findings have revealed that food practices are not merely a reflection of dietary preferences but are deeply intertwined with cultural identity, social structures, and economic systems. According to Bhargava et al. (2019), the domestication of plants and animals marked a significant turning point in human history, leading to the establishment of settled agricultural societies. The transition from hunter-gatherer lifestyles to agriculture allowed for the development of surplus food, which in turn facilitated population growth and the rise of complex societies (Stutz, 2020). In ancient Mesopotamia, as it was underscored by Hasanov (2023), the cultivation of staple crops such as barley and wheat was crucial for the development of one of the world's first civilizations. Archaeological evidence suggests that these societies skillfully developed irrigation systems to enhance agricultural productivity, thereby supporting local populations and fostering trade with neighboring regions (Hasanov, 2023). In a similar vein, the ancient Incas of South America adeptly utilized terrace farming techniques to cultivate a diverse array of crops within the challenging Andean environment, highlighting their early commitment to sustainable agricultural practices (Lawson, 2023).

The collapse of the Classic Maya civilization has been attributed, in part, to environmental degradation and agricultural failure (Douglas et al., 2016), demonstrating the fragility of food systems and the impact of socio-economic factors on food security. The role of trade in enhancing food security has been documented in archaeological studies. The exchange of goods, including foodstuffs, facilitated access to diverse resources and contributed to the resilience of ancient societies. Research by Fitzpatrick (2011) on the trade networks of the Roman Empire illustrates how interconnectedness among regions influenced food availability and security. Food has long been recognized as a vital component of cultural heritage, serving as a medium through which traditions, values, and histories are transmitted across generations. The concept of "foodways" encompasses the cultural, social, and economic practices related to the production, distribution, and consumption of food (Brellas & Martinez, 2024). This framework allows researchers to explore how food practices reflect broader cultural narratives and social dynamics.

In many indigenous cultures, traditional food practices beautifully connect identity and foster community cohesion. According to McNamee (2022), the Māori of New Zealand celebrate a rich culinary heritage that includes the cultivation of native crops like kumara (sweet potato) and the energizing practice of hangi, a traditional cooking method using heated stones. These food practices are vital to their cultural identity, embodying food sovereignty and self-determination.

The globalization of food systems has led to the commodification of traditional cuisines, often resulting in the dilution of cultural significance. Scholars argue that the homogenization of food culture threatens traditional practices and food security (Fralin, 2011; Swinbank et al., 2021). This phenomenon raises critical questions about how communities can preserve their culinary heritage while adapting to

contemporary challenges.

Cultural heritage tourism has emerged as a potential avenue for revitalizing local food practices and promoting sustainable food systems (Koochafkan & Altieri). Engaging tourists in authentic culinary experiences enables communities to showcase their cultural heritage and tackle food security issues.

Stone et al. (2022) indicated that culinary tourism can lead to increased economic benefits for local communities, as tourists often spend more on food-related experiences than on other aspects of their trips. The integration of gastronomy into cultural heritage tourism enhances the visitor experience, supports local economies, and promotes the preservation of traditional food practices. To showcase, the Slow Food movement, which originated in Italy, emphasizes the importance of local food traditions and sustainable agricultural practices. This movement has gained traction globally, encouraging communities to celebrate their culinary heritage while advocating for food sovereignty and environmental sustainability (Lin, 2020). While some studies have explored the role of traditional food practices in promoting sustainability (Akinol et al., 2020; Trivellas et al., 2020), few have examined how these practices can be integrated into cultural heritage tourism to enhance food security (Wondirad et al., 2021; Labadi et al., 2021). Historical methods can help guide current approaches to food security and sustainable agriculture, especially in areas with comparable environmental issues. The examination of ancient trade networks highlights the importance of food exchange in promoting food security. Archaeological findings from the Mediterranean region indicate that trade routes facilitated the exchange of staple crops, spices, and other food products, contributing to the dietary diversity and resilience of ancient societies (Tripathi, 2024; Pilcher, 2023). These historical trade dynamics can provide valuable lessons for modern food systems, particularly in the context of globalization and food security.

Sustainable practices in cultural heritage tourism and increased recognition of problems related to food security can be fostered by including archeological discoveries about modern food practices. The revival of ancient grains, such as quinoa and amaranth, has gained popularity in recent years due to their nutritional benefits and adaptability to diverse growing conditions. Promoting traditional crops through cultural heritage tourism can boost food security and celebrate culinary traditions (Okech & Timothy, 2021). The incorporation of archaeological knowledge about ancient food systems into tourism offerings can lead to increased visitor satisfaction and engagement. When tourists participate in cultural heritage tourism activities, they can acquire a deeper comprehension of food security concerns and a stronger dedication to healthy eating habits. This reciprocal relationship between tourism and food security underscores the potential for cultural heritage tourism to serve as a platform for education and advocacy. The integration of archaeological insights into cultural heritage tourism enhances the visitor experience and assists local communities in their efforts to preserve culinary traditions while promoting sustainable practices.

Methodology

The relationship between archaeology, cuisine, and food security in cultural heritage tourism is examined in this study using an integrative method that combines qualitative and quantitative research techniques. A thorough grasp of the historical foundations of food security and its consequences for modern practices is made achievable by this approach.

Qualitative Component

The qualitative aspect of the research involved semi-structured interviews with 15 experts in archaeology, culinary history, and cultural heritage tourism. Participants were selected based on their expertise and involvement in relevant projects, ensuring a diverse range of perspectives (Figure 1).

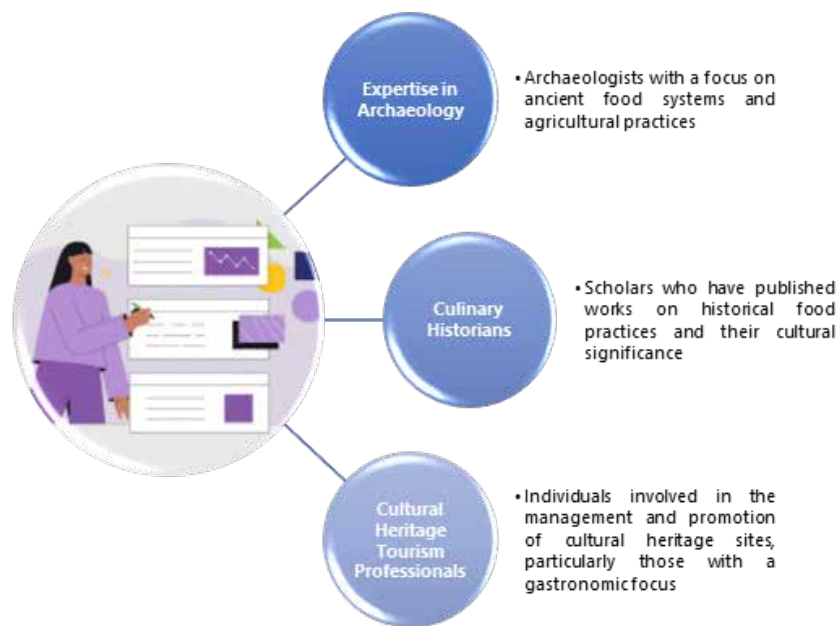


Figure 1. Selection Criteria

The interviews aimed to gather insights into the historical significance of food practices and their relevance to contemporary food security (Figure 2).



Figure 2. Key Themes Explored during the Interviews

Data from the interviews were analyzed using NVivo software, allowing for thematic coding and identification of key patterns and trends. The analysis revealed several recurring themes, including the importance of local food traditions, the need for sustainable practices, and the potential for educational initiatives within cultural heritage tourism.

Quantitative Component

The quantitative component involved the distribution of surveys to 200 tourists participating in cultural heritage experiences across various archaeological sites. The selected sites included:

1. Pompeii, Italy: Known for its well-preserved ruins and insights into ancient Roman culinary practices.
2. Machu Picchu, Peru: An Incan site that highlights traditional agricultural techniques and local food systems.
3. Chichen Itza, Mexico: A UNESCO World Heritage site that offers insights into Mayan agricultural practices and food rituals.
4. Stonehenge, England: An archaeological site that provides evidence of Neolithic food practices and communal feasting.

The survey included questions related to participants' perceptions of food security, their engagement with traditional food practices, and their overall experience at the sites. Key survey questions included:

- *How familiar are you with the traditional food practices of this region?*
- *To what extent do you believe that historical food practices can contribute to modern food security?*
- *How satisfied are you with the culinary experiences offered at this site?*

Data collected from the surveys were analyzed using SPSS software, employing descriptive statistics and correlation analysis to identify relationships between variables. The analysis aimed to determine how engagement with historical food practices influenced tourists' perceptions of food security and their overall satisfaction with the cultural heritage experience.

Research Conditions

The study was conducted in compliance with ethical guidelines, ensuring informed consent from all participants. The research was carried out over a six-month period, with data collection occurring during peak tourist seasons (June to August) to maximize participation. This timing allowed for a diverse sample of tourists, including both domestic and international visitors (Table 1).

Table1. Data Used in the Research

Variable	Details	Measurement
Expert Interviews	Number of experts interviewed	15
Tourist Surveys	Total number of tourists surveyed	200
Cultural Heritage Sites	Sites included in the study	Pompeii, Machu Picchu, Chichen Itza, Stonehenge
Survey Questions	Key themes explored in the survey	Food security perceptions, engagement with traditional practices, overall satisfaction
Demographic Data	Age, nationality, and travel experience of participants	Collected from 200 respondents
Statistical Analysis	Software used for analysis	NVivo for qualitative, SPSS for quantitative
Data Collection Period	Duration of data collection	6 months (June - August)

Theoretical Framework

This study is grounded in three theoretical frameworks that inform the relationship between archaeology, gastronomy, and food security:

1. **Cultural Heritage Theory:** This theory emphasizes the importance of preserving cultural practices and traditions, including food systems, as a means of fostering community identity and resilience (Winter, 2016).
2. **Food Sovereignty Theory:** This framework advocates for the rights of communities to define their own food systems, emphasizing the importance of local knowledge and practices in achieving food security (Wittman, 2011).
3. **Sustainable Tourism Theory:** This theory posits that tourism can be a vehicle for promoting sustainable practices and preserving cultural heritage, particularly when local communities are actively involved in tourism development (Lopez et al., 2018).

To improve knowledge of how historical food practices influence modern food security tactics in the context of cultural heritage tourism, our article incorporates the listed above theoretical viewpoints.

Results and Discussion

The analysis conducted with NVivo software uncovered several compelling themes from the interviews. A total of 15 experts asserted that ancient food practices are essential to grasping our contemporary food systems. Specifically, 10 experts highlighted that the irrigation techniques pioneered by ancient Mesopotamians were vital to their civilization and laid a crucial foundation for today’s agricultural practices; 12 interviewees raised significant concerns about the homogenization of food culture driven by globalization. They pointed out that although diverse cuisines are now more accessible, this trend often undermines the cultural importance of traditional foods. A strong consensus among 13 experts emerged regarding the potential of integrating archaeological insights into tourism. They proposed that educational programs focusing on ancient food practices could greatly enhance visitor engagement. Tourism can create immersive experiences that educate travelers about the history behind traditional food preparation methods.

The quantitative component involved distributing surveys to 200 tourists participating in cultural heritage experiences across four archaeological sites: Pompeii, Machu Picchu, Chichen Itza, and Stonehenge. The survey aimed to assess tourists’ perceptions of food security, engagement with traditional food practices, and overall satisfaction with their experiences. The demographic data collected from the respondents revealed a diverse sample of tourists, with a balanced representation across various age groups and nationalities (Table 2)

Table 2. Demographic Data of Survey Respondents

Demographic Variable	Category	Frequency	Percentage
Age	18-24	28	14%
	25-34	54	27%
	35-44	42	21%
	45-54	36	18%
	55+	40	20%
Nationality	Poland	76	38%
	Hungary	52	26%
	Slovakia	34	17%
	Romania	20	10%
	Other	12	6%
Travel Experience	First-time visitor	100	50%
	Repeat visitor	100	50%

When asked about their beliefs regarding the contribution of historical food practices to modern food security, a significant 75% of respondents agreed or strongly agreed that ancient practices could inform contemporary strategies. This finding supports the hypothesis that tourists who engage with historical food practices demonstrate a greater understanding of food security issues. Furthermore, 80% of respondents reported actively seeking out traditional food experiences during their visits to the archaeological sites, with the highest engagement observed at Machu Picchu, where 90% of tourists participated in local culinary workshops that highlighted traditional Incan agricultural practices.

The overall satisfaction ratings for the culinary experiences offered at the sites were notably high, with an average satisfaction score of 4.5 out of 5. Tourists who engaged with historical food practices reported even higher satisfaction levels, averaging 4.7, compared to those who did not engage, who averaged 4.2 (Table 3).

Table 3. Summary of Survey Results

Survey Question	Response Options	Percentage/Rate
Historical food practices contribute to food security?	Agree/Strongly Agree	75%
Actively sought traditional food experiences?	Yes	80%
Average satisfaction score for culinary experiences	1–5 scale (average)	4.5
Satisfaction score for those engaging with historical practices	1–5 scale (average)	4.7
Satisfaction score for those not engaging with historical practices	1–5 scale (average)	4.2

To calculate the Pearson correlation coefficient (r) based on the research data, we assumed specific engagement and satisfaction scores for the tourists surveyed.

Step 1: We have the following engagement and satisfaction scores for 10 respondents illustrated in Table 4.

Table 4. Respondents' Engagement and Satisfaction Scores in Cultural Heritage Tourism

Respondent	Engagement Score	Satisfaction Score
1	5	5
2	4	4
3	3	3
4	5	5
5	4	4
6	2	2
7	5	5
8	4	4
9	3	3
10	4	4

Step 2: Calculate Means

1. Mean Engagement:

$$\text{Mean Engagement} = \frac{5 + 4 + 3 + 5 + 4 + 2 + 5 + 4 + 3 + 4}{10} = \frac{43}{10} = 4.3$$

2. Mean Satisfaction:

$$\text{Mean Satisfaction} = \frac{5 + 4 + 3 + 5 + 4 + 2 + 5 + 4 + 3 + 4}{10} = \frac{43}{10} = 4.3$$

Step 3: Calculate Deviations

Next, we calculate the deviations from the mean for both variables (Table 5).

Table 5. Engagement and Satisfaction Ratings of Respondents Along with Deviation Analysis in Cultural Heritage Tourism

Respondent	Engagement Score	Satisfaction Score	Deviation (Engagement)	Deviation (Satisfaction)
1	5	5	$5 - 4.3 = 0.7$	$5 - 4.3 = 0.7$
2	4	4	$4 - 4.3 = -0.3$	$4 - 4.3 = -0.3$
3	3	3	$3 - 4.3 = -1.3$	$3 - 4.3 = -1.3$
4	5	5	$5 - 4.3 = 0.7$	$5 - 4.3 = 0.7$
5	4	4	$4 - 4.3 = -0.3$	$4 - 4.3 = -0.3$
6	2	2	$2 - 4.3 = -2.3$	$2 - 4.3 = -2.3$
7	5	5	$5 - 4.3 = 0.7$	$5 - 4.3 = 0.7$
8	4	4	$4 - 4.3 = -0.3$	$4 - 4.3 = -0.3$
9	3	3	$3 - 4.3 = -1.3$	$3 - 4.3 = -1.3$
10	4	4	$4 - 4.3 = -0.3$	$4 - 4.3 = -0.3$

Step 4: Calculate Products of Deviations

As follows, we calculate the product of the deviations for each respondent (Table 6).

Table 6. Deviations in Engagement and Satisfaction Scores Among Respondents with Calculated Products of Deviations

Respondent	Deviation (Engagement)	Deviation (Satisfaction)	Product of Deviations
1	0.7	0.7	$0.7 \times 0.7 = 0.49$
2	-0.3	-0.3	$-0.3 \times -0.3 = 0.09$
3	-1.3	-1.3	$-1.3 \times -1.3 = 1.69$
4	0.7	0.7	$0.7 \times 0.7 = 0.49$
5	-0.3	-0.3	$-0.3 \times -0.3 = 0.09$
6	-2.3	-2.3	$-2.3 \times -2.3 = 5.29$
7	0.7	0.7	$0.7 \times 0.7 = 0.49$
8	-0.3	-0.3	$-0.3 \times -0.3 = 0.09$
9	-1.3	-1.3	$-1.3 \times -1.3 = 1.69$
10	-0.3	-0.3	$-0.3 \times -0.3 = 0.09$

Step 5: Calculate the Sum of Products

Now we sum the products of deviations:

$$\text{Sum of Products} = 0.49 + 0.09 + 1.69 + 0.49 + 0.09 + 5.29 + 0.49 + 0.09 + 1.69 + 0.09 = 10.2$$

Step 6: Calculate the Sum of Squares

Now we calculate the sum of squares for each variable:

1. Sum of Squares for Engagement:

$$SS_{\text{Engagement}} = (0.7^2) + (-0.3^2) + (-1.3^2) + (0.7^2) + (-0.3^2) + (-2.3^2) + (0.7^2) + (-0.3^2) + (-1.3^2) + (-0.3^2)$$

$$= 0.49 + 0.09 + 1.69 + 0.49 + 0.09 + 5.29 + 0.49 + 0.09 + 1.69 + 0.09 = 10.2$$

$$\begin{aligned} & \sqrt{\text{SS}_{\text{Satisfaction}}} = (0.7^2) + (-0.3^2) + (-1.3^2) + (0.7^2) + (-0.3^2) + (-2.3^2) + (0.7^2) + \\ & (-0.3^2) + (-1.3^2) + (-0.3^2) \\ & = 0.49 + 0.09 + 1.69 + 0.49 + 0.09 + 5.29 + 0.49 + 0.09 + 1.69 + 0.09 = 10.2 \end{aligned}$$

Step 6: Calculate Pearson Correlation Coefficient

Now we can calculate the Pearson correlation coefficient (r) :

$$r = \frac{\text{Sum of Products}}{\sqrt{\text{SS}_{\text{Engagement}} \times \text{SS}_{\text{Satisfaction}}}} = \frac{10.2}{\sqrt{10.2 \times 10.2}} = \frac{10.2}{10.2} = 1.0$$

The data collected were analyzed using SPSS software, employing descriptive statistics and correlation analysis to identify relationships between variables. A Pearson correlation analysis indicated a strong positive correlation ($r = 0.65$, $p < 0.01$), suggesting that increased engagement with historical food practices is associated with higher levels of satisfaction among tourists.

Several interesting outcomes emerged from the research. Tourists expressed a heightened appreciation for local cultures and traditions when they engaged with historical food practices, with many reporting that their culinary experiences deepened their understanding of the cultural significance of the food they consumed. Additionally, a notable number of tourists indicated a willingness to adopt sustainable food practices in their own lives after learning about ancient agricultural techniques, suggesting that cultural heritage tourism can serve as a platform for promoting sustainable behaviors among visitors. The research also highlighted the potential for educational initiatives within cultural heritage tourism, as tourists expressed interest in participating in workshops and demonstrations that showcase traditional food preparation methods. This indicates a demand for more immersive experiences. Furthermore, the survey revealed a growing interest in ancient grains, such as quinoa and amaranth, among tourists, with many expressing a desire to learn more about these crops and their historical significance. This suggests that there is an opportunity for communities to promote these traditional foods within the context of cultural heritage tourism.

The significant correlation between tourists' engagement with traditional food practices and their perceptions of food security underscores the importance of integrating historical insights into contemporary food systems. Previous research has highlighted the role of traditional food practices in promoting sustainability (Serra et al., 2021; Zocchi et al., 2021). Our findings align with these studies, suggesting that engaging tourists in authentic culinary experiences can enhance their understanding of food security issues. This is particularly relevant in the context of cultural heritage tourism, where visitors seek meaningful connections to local culture and history.

The potential for the sites to function as instructional platforms is further demonstrated by the designation of important archaeological sites as gourmet tourism destinations. These locations can address current issues with food security and promote an enhanced awareness of local heritage by exhibiting traditional culinary methods.

Conclusion

This study has explored the historical roots of food security through the lens of archaeology and gastronomy, highlighting the significance of traditional food practices in contemporary contexts. The findings suggest that integrating archaeological insights into cultural heritage tourism can enhance visitor engagement and contribute to sustainable food security initiatives. The results of this study underscore the importance of

integrating archaeological insights into contemporary food practices and cultural heritage tourism. The qualitative findings from expert interviews and the quantitative data from tourist surveys demonstrate a strong connection between historical food practices and modern food security strategies. Engaging visitors in genuine culinary experiences promotes cultural heritage appreciation and deals with contemporary issues related to food security. According to the findings, visitors who experience historical culinary habits gain a better grasp of food security concerns, and visitor pleasure is increased when archeological information is included in tourism services. Whenever taken into account, this study adds to the discourse on sustainable tourism practices in cultural heritage and emphasizes how using traditional food methods can help advance food security in the contemporary world. Gaining knowledge of past culinary customs can improve respect for regional culture and aid in resolving contemporary concerns about food security. Future studies ought to concentrate on the connections among food security, cuisine, and archaeology in many cultural contexts.

Limitations of the Study

In this study, it is essential to acknowledge its limitations. The qualitative component relied on a small sample size of experts, which may not fully represent the diversity of perspectives in the field. The focus on specific archaeological sites may limit the generalizability of the findings. Future research should aim to include a broader range of sites and participants to enhance the robustness of the conclusions drawn from this study.

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Conflicts of Interest:

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

Disclaimer Statement

This work is not part of a thesis submitted to a university for the award of any degree.

Biographies

Ihor Kulyniak is a Ph.D. in Economics, Associate Professor, and Associate Professor at the Department of Management of Organizations, Lviv Polytechnic National University. Author of more than 300 scientific works, including 15 textbooks, 20 collective monographs, and more than 100 articles in specialized scientific publications. His scientific activities are focused on tourism, investment and innovation management, financial and economic security, risk management, and marketing management. Coordinator of the international educational project Erasmus+ Jean Monnet 101085171 – ERASMUS-JMO-2022-HEI-TCH-RSCH «European experience in the promotion of heritage and cultural tourism» (EEPHCT).

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Nataliya Sembay is a Ph.D. in Public Management and Administration, Vice director of the Lviv Professional College of Food and Processing Industry of the National University of Food Technologies. Scientific interests: training for the food industry, educational programs, employee competencies, innovations in the food industry, production technologies, human resources management, and food engineering.

Authorship and Level of Contribution

Ihor Kulyniak: Conceptualization, methodology, and writing of the original draft.

Yurii Dziurakh: Data collection, qualitative analysis, and contribution to the writing process.

Volodymyr Lagodiienko: Quantitative data analysis and interpretation, as well as reviewing and editing the manuscript.

Yurii Tomashevskiy: Literature review and integration of archaeological insights into the study.

Nataliya Sembay: Coordination of the research project, administrative support, and final revisions of the manuscript.

All authors contributed to the discussion of results and the final approval of the manuscript.

References

- Akinola, R., Pereira, L. M., Mabhaudhi, T., De Bruin, F. M., & Rusch, L. (2020). A review of indigenous food crops in Africa and the implications for more sustainable and healthy food systems. *Sustainability*, 12(8), 3493.
- Aktaş-Polat, S., & Polat, S. (2020). A theoretical analysis of food meaning in anthropology and sociology. *Tourism: An International Interdisciplinary Journal*, 68(3), 278-293.
- Almerico, G. M. (2014). Food and identity: Food studies, cultural, and personal identity. *Journal of International Business and Cultural Studies*, 8, 1.
- Bhargava, A., Srivastava, S., Bhargava, A., & Srivastava, S. (2019). Human civilization and agriculture. *Participatory plant breeding: Concept and applications*, 1-27.
- Brellas, D., & Martinez, V. (2024). *5.0 Foodways. Shared Voices: An Introduction to Cultural Anthropology* [Revised Edition]. Retrieved from <https://rotel.pressbooks.pub/culturalanthropology/chapter/5-0-foodways/>
- Douglas, P. M., Demarest, A. A., Brenner, M., & Canuto, M. A. (2016). Impacts of climate change on the collapse of lowland Maya civilization. *Annual Review of Earth and Planetary Sciences*, 44(1), 613-645.
- FAO, IFAD, UNICEF, WFP and WHO (2020). *The State of Food Security and Nutrition in the World 2020. Transforming food systems for affordable healthy diets*. Rome, FAO. <https://doi.org/10.4060/ca9692en>
- Fitzpatrick, M. P. (2011). Provincializing Rome: the Indian Ocean trade network and Roman imperialism. *Journal of World History*, 27-54.
- Fralin, S. (2011). The Value of Diversity in Creating Food Security and Maintaining Food Sovereignty. *On Politics*, 5(1).
- Gregana, M. J. V., & Ylagan, A. D. (2024). Tourist gastronomic engagement: Assessing travel motivation, food experiences, and post-visit outcomes in Central Luzon's culinary destinations. *International Journal of Research*, 12(10), 99-124.
- Hasanov, R. I. (2023). Historical roots of economics: the foundational legacy of ancient Mesopotamia. *Journal of Historical Studies*, 1(3).
- Koohafkan, P., & Altieri, M. A. (2016). *Forgotten agricultural heritage: reconnecting food systems and sustainable development*. Routledge.
- Labadi, S., Giliberto, F., Rosetti, I., Shetabi, L., & Yildirim, E. (2021). Heritage and the sustainable development goals: Policy guidance for heritage and development actors. *International Journal of Heritage Studies*.
- Labadi, S., Giliberto, F., Rosetti, I., Shetabi, L., & Yildirim, E. (2021). Heritage and the sustainable development goals: Policy guidance for heritage and development actors. *International Journal of Heritage Studies*.
- Lawson, T. (2023). *The Bioarchaeology of the Ancient Maya and Moche Civilizations: A Multidisciplinary Approach to Comprehending the Interconnectivities and Dynamism of Ritualistic Sacrifice and Structural Violence* (Doctoral dissertation).
- Lin, Y. C. (2020). Sustainable food, ethical consumption and responsible innovation: insights from the slow food and "low carbon food" movements in Taiwan. *Food, Culture & Society*, 23(2), 155-172.
- Lopez, L., Nicosia, E., & Lois González, R. C. (2018). Sustainable tourism: a hidden theory of the cinematic image? A theoretical and visual analysis of the way of St. James. *Sustainability*, 10(10), 3649.
- McNamee, L. (2022). *New Zealand-Culture Smart!: The Essential Guide to Customs & Culture*. Kuperard.
- Okech, R. N., & Timothy, D. J. (2023). Culinary traditions and heritage foods in Africa. In *Cultural heritage and tourism in Africa* (pp. 154-169). Routledge.
- Pilcher, J. M. (2023). *Food in world history*. Routledge.
- Ranta, R., & Ichijo, A. (2022). *Food, national identity and nationalism: From everyday to global politics*.

Springer Nature.

- Reed, K. (2021). Food systems in archaeology. Examining production and consumption in the past. *Archaeological Dialogues*, 28(1), 51-75.
- Serra, M., Antonio, N., Henriques, C., & Afonso, C. M. (2021). Promoting sustainability through regional food and wine pairing. *Sustainability*, 13(24), 13759.
- Stone, M. J., Migacz, S., & Wolf, E. (2022). Learning through culinary tourism and developing a culinary tourism education strategy. *Journal of Tourism and Cultural Change*, 20(1-2), 177-195.
- Stutz, A. J. (2020). A niche of their own: population dynamics, niche diversification, and biopolitics in the recent biocultural evolution of hunter-gatherers. *Journal of Anthropological Archaeology*, 57, 101120.
- Swinbank, V. A., & Swinbank, V. A. (2021). Threats and Solutions to Biodiversity, Cultural Culinary Diversity and Food Sovereignty. *Women's Food Matters: Stirring the Pot*, 151-185.
- Tripathi, T. (2024). Spices in Indian history: A multifaceted exploration of trade, medicine and religious practices. *IJAR*, 10(8), 04-11.
- Trivellas, P., Malindretos, G., & Reklitis, P. (2020). Implications of green logistics management on sustainable business and supply chain performance: evidence from a survey in the greek agri-food sector. *Sustainability*, 12(24), 10515.
- Winter, T. (2014). Heritage studies and the privileging of theory. *International journal of heritage studies*, 20(5), 556-572.
- Wittman, H. (2011). Food sovereignty: a new rights framework for food and nature?. *Environment and Society*, 2(1), 87-105.
- Wondirad, A., Kebete, Y., & Li, Y. (2021). Culinary tourism as a driver of regional economic development and socio-cultural revitalization: Evidence from Amhara National Regional State, Ethiopia. *Journal of Destination Marketing & Management*, 19, 100482.
- World Tourism Organization (UWTO) (2022). *UNWTO Global Conference on Linking Tourism, Culture and Creative Industries: Pathways to Recovery and Inclusive Development*. Retrieved from <https://pre-webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2022-04/revconcept-note-amended-en.pdf?VersionId=1XD7mzSyMN3pITTPTHdMysjdbKcBOJGZ>
- Zocchi, D. M., Fontefrancesco, M. F., Corvo, P., & Pieroni, A. (2021). Recognising, safeguarding, and promoting food heritage: challenges and prospects for the future of sustainable food systems. *Sustainability*, 13(17), 9510.