



## Fermenting Tourism: Look Back to Move Forward



Tracy Berno<sup>a</sup>; Francesc Fusté-Forné<sup>b\*</sup>

<sup>a</sup> School of Hospitality and Tourism, Auckland University of Technology, Auckland, New Zealand;

<sup>b</sup> Department of Business, University of Girona, Girona, Spain.

\*Correspondence: [francesc.fusteforne@udg.edu](mailto:francesc.fusteforne@udg.edu)

Received 03 April 2023; Revised 05 July 2023; Accepted 29 July 2023

**ABSTRACT:** Fermentation captures both the meaning of culture and nature in a process of food transformation. Food heritages and landscapes protect and promote ‘food’ as part of the cultural and environmental values of places. Food tourists aim to discover places through its food, and the values attached to food production and consumption. This research note explores the unexplored relationship between fermentation and food from a tourism perspective. The production and consumption spaces represent avenues towards the process of attaching tourism values to fermentation, which are manifested in products such as bread and beverages such as beer, and also have a strong connection with places such as cheese in Italy and whisky in Scotland. Drawing from the understanding of fermentation as a source of authenticity in food and beverage tourism, the paper is the first to discuss the values of fermentation as a place-based expression to develop the link between food and tourism. This offers theoretical and practical implications of fermenting tourism and opens new opportunities to expand the understanding of the role that people, places and practices play in food tourism spaces. The research note also anticipates the crucial role of fermenting tourism in food tourism management and marketing in the context of regenerative and sustainable development.

**KEYWORDS:** food tourism; regional development; sense of place; fermentation, gastronomy

### Introduction

The word “fermentation” can mean both the literal phenomenon of cellular metabolism, but also more broadly, to incite or stir up, excitement and even bubblyness. Common across both definitions is that fermentation is a transformative process. We argue that it is time to harness the bubbly, transformative process of fermentation and apply it to food and beverage tourism. This will add texture to recent conversations which applied the understanding of fermentation to leisure (Cleary, 2020). Food and beverage tourism have been largely analyzed in the last couple of decades from destination management and marketing perspectives (Hall and Sharples, 2003; Long, 2004; Ellis et al., 2018; Fusté-Forné and Wolf, 2023), and from economic and social approaches. Also, different research have studied the significance of food and beverage tourism from both supply and demand perspectives (Dedeoğlu et al., 2022; Haller et al., 2020; Martins et al., 2017), and have delved into how food and beverage tourism contributes to regional development (Hall and Gössling, 2016; Rachão et al., 2019) and the attribution of

tourism values to food (Berno et al., 2022; Ren and Fusté-Forné, 2023). While the crucial impact of food and beverage tourism on communities and places is important and the growing role of food tourism in the current context of tourism (see Okumus, 2021), previous research lacks an understanding of the pivotal role of ‘fermentation’ in the construction of the relationships between food and tourism. These bridges are built on the understanding of food and beverage tourism as the act of traveling for a taste of place in order to get a sense of place (World Food Travel Association, 2023) and where the authors observed a potential growth of fermenting tourism.

Fermentation is a historical technique – both a biological and a cultural process – which allows to prepare and preserve food, and create flavor. Departing from the conceptualization of fermentation as a process tied to both culture and nature, this research contributes to the re-development of food and beverage tourism research by studying the renaissance of fermentation as an avenue to explore the source of food, which engages visitors and tourists with a reconnection to culture and nature in order to understand sense of place in a deeper and different way. This is explored through a niche form of tourism defined as fermenting tourism. Several examples of fermented products that engage visitors with fermenting tourism include beverages such as beer or wine, and foods such as bread or cheese. The UNESCO intangible cultural heritage list includes some of them. For example, to fully participate with Korean culture, it is necessary to try kimchi, which is a traditional Korean fermented vegetable product which shows the diverse practices embedded in fermentation. Specifically, “the popularity of kimchi is attributed to the unique blending and fermentation of vegetables and other ingredients” (Lee, 1991, p.400). This place-based fermented food product expresses both the culture of Korea as well as its territorial attributes that can only authentically be experienced *in situ* in Korea. This is also manifested in other products such as Champagne (which is produced in a UNESCO recognized World Heritage site) and Cognac in France, Denominazione di Origine Protetta (DOP) cheeses in Italy or Whisky in Scotland to name a few examples that can later allow food entrepreneurs to develop the foundations of fermenting tourism and destinations to expand their food tourism management and marketing strategies around fermenting tourism.

## **Exploring fermentation in tourism through food-based experiences**

### ***A research gap in food and beverage tourism literature***

While food and beverage tourism have been widely investigated during recent years, the authors of this paper argue that there is a crucial omission in the literature which is the role of fermentation as a source of food and beverage tourism attraction and authenticity. Food and beverage tourism experiences often rely on knowledge about products such as wine, beer, cheese or bread, among others. Fermentation is present in many traditional products. Previous research stated that traditional foods contribute to “valorise niche productions, defend small-scale producers, strengthen the link between food and places, and safeguard the territories and the biodiversity of autochthonous crops and livestock” (Settanni and Moschetti, 2014, p.52). The role of single products within the food and beverage tourism scenario is widely contested (see also Tsai and Wang, 2017; Vo-Thanh and Kirova, 2018), as it is the close connection between products, places (the natural environment) and people (the cultural ingredient). Also, food and beverage tourism engage with several experiential dimensions in which several features along the food value chain dynamically co-exist.

A food product is the sum of the local landscape where it grows and the people who have preserved the cultural heritage and rural traditions attached to its production and consumption processes. As Berno et al. (2014) argued, the activities of the primary sector are a prerequisite for food and beverage tourism. However, the role of fermentation as a prerequisite for food and beverage tourism is a lost opportunity to offer a deeper and transformative understanding of the dynamic and genuine relationships between food and tourism. Fermentation processes refer to the use of traditional biotechnology techniques which result in natural transformations (Martinho, 2019) to give foods specific forms and tastes (Massacesi, 2020).

### ***Fermentation makes food unique***

Fermentation is the origin of food identity. According to Settanni and Moschetti (2014), “the microflora of a typical fermented food defines the final characteristics of the resulting product, and often reflects the environment and systems of production” (p. 52). Fermentation reveals a close connection between landscapes and lifestyles which represents processes of social and environmental transformation. It also defines strong links between agriculture and tourism, and local identity (Myles, 2020). In recent years, studies have paid a growing attention to the role of fermentation in food production and the geographies of fermentation are attracting an increasing international scholarship in relation to different products (Argent, 2018). Rogerson (2019) has particularly focused on the geographies of beer based on indigenous knowledge about fermentation in rural areas. This knowledge is communicated from generation to generation.

Fermentation is therefore a process of transformation which relies on “a collaborative performance of humans, microbes, and material arrangements in interaction with each other – understanding food-making itself as carried out by and with micro-organisms –” (Cleary, 2020, pp.503-504). Settanni and Moschetti (2014) stated that in relation to traditional fermented food production, fermenting microorganisms represent the link between food and the environmental, historical and social characteristics of a place. “Since the microbiota of the typical fermented foods determine their final characteristics, they act as the producer’s ‘coworkers’ and are part of the production traditions established over time” (Settanni and Moschetti, 2014, p.53).

### ***Fermentation and fermenters***

From a production perspective, fermentation is a driver of a specific wine aroma (Bezusov et al., 2020). This understanding, explained earlier, shows a clear connection between wine consumption and tourism. For example, Getz (2000) acknowledged that one of the particularities of the wine tourism experience, which is sensorial in nature, is fermentation. This also happens with cheese making. Cheesemakers are fermenters that “hope to establish ‘who’ [microbes] are in their cheeses in order to create a unique, marketable – and thus economically profitable – ‘signature’ taste” (Cleary, 2020, p.500). They protect and promote the *terroir*. Massacesi in her doctoral thesis reported that “the cheese-makers who transform the milk into cheese are the protagonist of the cheesemaking process, and together with the machines, knowledge, temperatures and ferments participate in the ‘food soul’ of this cheese” (Massacesi, 2020, p.233).

Fermentation happens at both large and small scales, that is, both artisanal and industrial production. In this sense, “legitimation of artisanal practice emerged not from fixed of terroir, but fermentation practices which encourage the flourishing of mixed microbial cultures (a home for all) over industrial (standardized only, no strangers allowed) homogeneity” (Cleary,

2020, p.500). While previous studies have highlighted that industrialization of fermentation provides standard products (Settanni and Moschetti, 2014), artisanal production relies on indigenous microorganisms. “Through the natural culture, the specific characteristics of the place are brought again into the cheese and the cheese becomes strongly rooted in the terroir” (Massaccesi, 2020, p.251). This in turn is a powerful tool to design marketing strategies. The food and beverage tourism storytelling must consider all the dimensions of food production and consumption which also include fermentation (Woldarsky, 2019).

### ***The road of fermentation in tourism***

The linkages between fermentation and tourism are negotiated within food-based experiences. Myles et al. (2020) affirmed that “consumables such as beer, wine, and spirits play an important role in how places, both urban and rural, develop, grow, and change. Communities across the rural-urban interface mobilize the production of place-marketed fermented goods in the pursuit of economic gain, tourism development, and/or progress toward sustainability via the localized consumption of those same goods” (p.21). This will also lead to include fermenting tourism as part of the tourism portfolio of destinations, and increase their competitiveness through food and beverage experiences (Knollenberg et al., 2021) which are also a relevant source of destination management and marketing (Du Rand and Heath, 2006).

Previous research has focused on food festivals such as Ganggyeong Fermented Seafood Festival from a cultural tourism perspective (Noh and Jee, 2013). Also, previous studies have analyzed the relationship between the package design of farm products and the satisfaction with a farm experience (Park, Shin and Woo, 2014), where the role of fermentation is materialized in souvenirs (see, for example, Fusté-Forné et al., 2022). Also, consumers have a strong motivation to visit rural areas not only to buy agricultural products but also to learn first-hand about the production process (Jin et al., 2014).

### ***The unique attraction of fermented foods***

In addition, a very interesting study elaborated by Syahrivar (2019) has analyzed the cultural history and the contribution to tourism sector of Bika Ambon of Indonesia. The fermentation and the unique mixture of local herbs provide Bika Ambon with a unique taste and texture. Bika Ambon “is one of the most delicate cakes in terms of preparation and taste. The ingredients of Bika Ambon are tapioca or sago, wheat flour, sugar, coconut milk, and eggs and added bread yeast for fermentation. Bika Ambon has been a magnet for both local and international tourists visiting Medan” (Syahrivar, 2019, p.1). Another example is found in Miang or fermented tea leaf which is part of the Mae Kampong community, in northern Thailand. “Miang is also the primary source of income and a tourist attraction. Additionally, Miang is an item in religious and local rituals. The Miang culture and the local lifestyle are bonded deeply as a sustainable economy, society, and environment. The wisdom in Miang culture encourages a better quality of life for the Mae Kampong community” (Chingwong et al., 2021, p.1).

The relationships between fermentation and tourism through food may also lead to the development of fermenting tourism destinations. This may be the case of Korea, Northern Thailand or Tasmania. In relation to the latter example, Tasmania is a rural island state in southern Australia, whose high-quality produce includes fermented foods such as whisky, wine, cheese, and craft cider. “Tasmania’s nascent fine-food industry is intimately tied to tourism” (Betzold et al., 2018, p.867). This is the case of the project ‘FermenTasmania’ which does not

only foster product and skills development based on fermented foods, but it also relies on fermentation as a source of food and beverage tourism. Food and tourism are among the most relevant industries for several countries around the world and paying attention to the potential of 'fermentation' is crucial to enhance its economic, social, cultural, and environmental values.

## Conclusion

Fermented foods reveal a close relationship between products and sense of place, and drive people to engage more deeply with a destination, directly with land but also symbolically with culture. This research argues that fermentation can be a focal point for tourism development. Drawing from the relationships between people and microbiota, awarding a tourism value to fermentation will extend the boundaries of what is meant by food and beverage tourism and reconceptualize what fermentation means when you look at a culture from a social anthropological way and biological way. While fermentation has been traditionally used at home kitchens, a growing number of amateur fermenters and professional cooks are adopting fermentation as a new process which is based on old knowledge. In the current context, "the COVID-19 pandemic has encouraged new attention to self-sufficiency and cross fertilization of culinary skills, leading to booms in at-home sourdough fermentation, homebrewing and yogurt culturing in some regions" (Feuer, 2020, p.1). This also relies on a sustainable understanding of food consumption. Since authentic food and beverage tourism is focused on an intimate relationship with seasons, which in turn contributes to the development of sustainable supply chains, fermentation plays an active part in the promotion of slow and wild food and beverage tourism and the real consumption of organic food. First-hand and direct experiences are leading the postmodern planning, management and marketing of food and beverage tourism experiences. Visitors and tourists aim to know where foods come from and how they are made as a way to connect with place. This knowledge allows them to participate in local landscapes and lifestyles actively and profoundly. Fermentation, as food does, plays a powerful role in the configuration of culture and the relationships between people and place.

While fermentation has widely implemented by well-known restaurants (for example, Noma), recent trends on food consumption show that people are changing eating habits and moving to community-based agriculture and other sustainable and regenerative practices (Morón-Corujeira and Fusté-Forné, 2022). Fermentation is shifting global food culture which results in a potential opportunity for food and beverage tourism. Fermentation emerges as a pathway to protect terroir and promote sustainability in a way that aligns with regenerative principles (Hussain and Haley, 2022) and diversity of economic practices (Cave and Dredge, 2020). Fermentation is a process that can be valued through tourism. This promises a new tourism development way for some places, such as for example the Faroe Islands (Svanberg, 2023), as fermentation tourism can be seen as a source of food and beverage tourism attraction to experience authenticity. The process of fermentation is rarely highlighted in previous literature and the paper contributes to this area of research to open discussion on fermenting tourism as a new form of tourism. This research advocates that fermentation is a place-based expression which fosters the relationships between people, culture, and nature, and establishes a strong and enduring link between food and tourism. In order to develop fermenting tourism, there are avenues for future research to investigate, for example, about people who ferment and ingredients they use, how long the fermentation period is, and new experiences through fermentation in relation to both production and consumption, and how this informs a sustainable development of the bridges between food and tourism through fermentation.

## References

- Argent, N. (2018). Heading down the road?: Australian rural development and the evolving spatiality of the craft beer sector. *Journal of Rural Studies*, 61, 84-99.
- Berno, T., Laurin, U., & Maltezakakis, G. (2014). The special role of agriculture in food tourism. *Have fork will travel: Handbook for food tourism*, 105-114.
- Berno, T., Rajalingam, G., Miranda, A. I., & Ximenes, J. (2022). Promoting sustainable tourism futures in Timor-Leste by creating synergies between food, place and people. *Journal of Sustainable Tourism*, 30(2-3), 500-514.
- Betzold, A., Carew, A. L., Lewis, G. K., & Lovell, H. (2018). The emergence, articulation and negotiation of a new food industry initiative in rural Australia: boundary object, organisation or Triple Helix model?. *Sociologia Ruralis*, 58(4), 867-885.
- Bezusov, A., Kalmykova, I., Bilko, M., Melikh, T., & Shcherbina, V. (2020). Developing a technology of local wines with the enhanced aromatic profile. *Science and Technology*, 14(2), 77-86.
- Cave, J., & Dredge, D. (2020). Regenerative tourism needs diverse economic practices. *Tourism Geographies*, 22(3), 503-513.
- Chinwong, D., Charaj, P., Panitsupakamol, P., Chankaew, T., Chinwong, S., & Saenjum, C. (2021). Local Wisdom of Miang Lifestyle and Community for Sustainable Development in Northern Thailand. *Sustainability*, 13(13), 7381.
- Cleary, L. (2020). Fermenting uncertainty: re-imagining leisure under liquid modernity. *Annals of Leisure Research*, 23(4), 492-509.
- Dedeoğlu, B. B., Mariani, M., Shi, F., & Okumus, B. (2022). The impact of COVID-19 on destination visit intention and local food consumption. *British Food Journal*, 124(2), 634-653.
- Du Rand, G. E., & Heath, E. (2006). Towards a framework for food tourism as an element of destination marketing. *Current Issues in Tourism*, 9(3), 206-234.
- Ellis, A., Park, E., Kim, S., & Yeoman, I. (2018). What is food tourism?. *Tourism Management*, 68, 250-263.
- Feuer, H. N. (2020). Fermented landscapes: lively processes of socio-environmental transformation. *Food, Culture and Society*, 1-2.
- Fusté-Forné, F., Modica, F. and Sgroi, F. (2022). Cheese as a food souvenir in Sicily. *Journal of Marine and Island Cultures*, 11(2), 193-211.
- Fusté-Forné, F., & Wolf, E. (2023). *Contemporary Advances in Food Tourism Management and Marketing*. Routledge.
- Getz, D. (2000). *Explore wine tourism: management, development and destinations*. Cognizant Communication Corporation.
- Hall, C. M., & Gössling, S. (2016). *Food tourism and regional development. Networks, products and trajectories*. Routledge.
- Hall, C.M. and Sharples, L. (2003). The consumption of experiences or the experience of consumption? An introduction to the tourism of taste. In Hall, C.M., Sharples, L., Mitchell, R., Macionis, N. and Cambourne, B. (Eds), *Food Tourism Around the World, Development, Management and Markets* (pp.13-36). Butterworth Heinemann.
- Haller, C., Thach, L., & Olsen, J. (2020). Understanding eWinetourism practices of European and North America wineries. *Journal of Gastronomy and Tourism*, 4(3), 141-156.
- Hussain, A., & Haley, M. (2022). Regenerative tourism model: challenges of adapting concepts from natural science to tourism industry. *Journal of Sustainability and Resilience*, 2(1), 4.

- Jin, H. R., Seo, J. Y., & Jo, L. H. (2014). An analysis on consumers' awareness of a rural specialties exhibition shop and the design development: Focusing on Rural Tourism Village. *Journal of Korean Society of Rural Planning*, 20(4), 253-262.
- Knollenberg, W., Duffy, L. N., Kline, C., & Kim, G. (2021). Creating competitive advantage for food tourism destinations through food and beverage experiences. *Tourism Planning and Development*, 18(4), 379-397.
- Lee, Y. C. (1991). Kimchi: the famous fermented vegetable product in Korea. *Food Reviews International*, 7(4), 399-415.
- Long, L. M. (2004). *Culinary tourism*. University Press of Kentucky.
- Martinho, V. J. P. D. (2019). *Historical records of wine: Highlighting the old wine world*. Leibniz Information Centre for Economics, Kiel, Hamburg.
- Martins, J., Gonçalves, R., Branco, F., Barbosa, L., Melo, M., & Bessa, M. (2017). A multisensory virtual experience model for thematic tourism: A Port wine tourism application proposal. *Journal of Destination Marketing and Management*, 6(2), 103-109.
- Massacesi, C. (2020). *Food Heritagisation and Tourism. Following the Cheese in the Italian Dolomites* (Doctoral dissertation, University of Otago).
- Myles, C. C. (2020). *Fermented landscapes: Lively processes of socio-environmental transformation*. University of Nebraska Press.
- Myles, C. C., Holtkamp, C. R., McKinnon, I., Baltzly, V. B., & Coiner, C. (2020). How localized, craft fermentation industries make place, for better or worse. *Fermented landscapes: Lively processes of socio-environmental transformation*, 21-56.
- Morón-Corujeira, N., & Fusté-Forné, F. (2022). Visiting a furancho: local lifestyles as drivers of (food) tourism transformation. *Journal of Tourism Futures*, 8(3), 393-396.
- Noh, W. J., & Jee, J. H. (2013). Effects of Cultural Tourism Festival's experiential elements on brand value and festival image-with focus on Ganggyeong Fermented Seafood Festival. *The Journal of the Korea Contents Association*, 13(3), 414-427.
- Okumus, B. (2021). Food tourism research: a perspective article. *Tourism Review*, 76(1), 38-42.
- Park, D. J., Shin, H. H., & Woo, S. G. (2014). A study on improving packaging design for farm· Specialty purchase satisfaction. *Journal of Korean Society of Rural Planning*, 20(4), 157-164.
- Rachão, S., Breda, Z., Fernandes, C., & Joukes, V. (2019). Food tourism and regional development: A systematic literature review. *European Journal of Tourism Research*, 21(1), 33-49.
- Ren, C., & Fusté-Forné, F. (2023). Food, national identity and tourism in Greenland. *Food, Culture and Society*, 1-25.
- Rogerson, C. M. (2019). African traditional beer: changing organization and spaces of South Africa's sorghum beer industry. *African Geographical Review*, 38(3), 253-267.
- Settanni, L., & Moschetti, G. (2014). New trends in technology and identity of traditional dairy and fermented meat production processes: preservation of typicality and hygiene. *Trends in Food Science and Technology*, 37(1), 51-58.
- Syahrivar, J. (2019). Bika Ambon of Indonesia: history, culture, and its contribution to tourism sector. *Journal of Ethnic Foods*, 6(1), 1-6.
- Svanberg, I. (2023). Fermented mutton in the Faroe Islands: the survival of a local artisanship and food heritage. *Journal of Ethnic Foods*, 10(1), 16.
- Thanh, T. V., & Kirova, V. (2018). Wine tourism experience: A netnography study. *Journal of Business Research*, 83, 30-37.
- Tsai, C. T. S., & Wang, Y. C. (2017). Experiential value in branding food tourism. *Journal of Destination Marketing and Management*, 6(1), 56-65.

Woldarsky, V. (2019). Tapping into the emotions of the wine consumer through storytelling: A case study. *BIO Web of Conferences*, 15(03012), 1-7. 42<sup>nd</sup> World Congress of Vine and Wine.

World Food Travel Association (2023). <https://www.worldfoodtravel.org>.



All papers are published under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0). For more details, visit <https://creativecommons.org/licenses/by-nc/4.0/>.