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Elitsa Stoilova

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## **The Bulgarianization of Yoghurt: Connecting Home, Taste, and Authenticity**

ELITSA STOILOVA

*Department of Industrial Engineering & Innovation Sciences, Eindhoven University of  
Technology, Eindhoven, The Netherlands*

*This article addresses the popularity of yoghurt, which came into vogue in France, Great Britain, Spain, Germany, and the Netherlands during the 1910s and 1920s, and the assumption that Bulgaria is its homeland. It traces the appropriation of yoghurt in new cultural and culinary contexts of Western Europe, where it was rather unknown. The case of Bulgarian yoghurt authentication and commodification provides an example of the transnational migration of food considered as a cultural construct but also as a specific taste and technology, across political, cultural, and culinary boundaries. The fact that Bulgaria was considered yoghurt's homeland is an example of the tangible relations between place of authenticity, food, and distinguished taste. In order to trace these processes of authentication, commodification, and appropriation of food, I have mobilized various types of sources: international and national medical, dairy, health, and trade-related journals; advertisements; and travelogues of European travelers in Balkan lands and the Ottoman Empire.*

On February 1, 2002, Bulgarian delegates at the World Trade Organization (WTO) session in Geneva demanded protection of yoghurt labeling in order to prevent producers in other countries naming their products Bulgarian or Bulgarian-style yoghurt. Bulgarian officials claimed that the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement incorrectly allowed the labeling of Bulgarian or Bulgarian-style yoghurt by any producer.<sup>1</sup> Other

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Elitsa Stoilova is now affiliated with the University of Plovdiv, Plovdiv, Bulgaria.

Address correspondence to Elitsa Stoilova, 9A Elin Pelin Str., Plovdiv 4015, Bulgaria.  
E-mail: [elitsastoilova@gmail.com](mailto:elitsastoilova@gmail.com)

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WTO countries, confronted with a similar lack of legal protection for their regional products, agreed with the Bulgarians.<sup>2</sup>

France opposed Bulgarian efforts to protect yoghurt as a traditional Bulgarian product because French producers already routinely used the labels of Bulgarian yoghurt and Bulgarian-style yoghurt as generic terms.<sup>3</sup> The ongoing political struggle over geographical indications suggested that the category was not so much based on traditions and the protection of indigenous knowledge but more on a case of national and international politics, negotiations, and regulations.

Eight years after this failure to globally protect what Bulgarians considered their national product, another case directed international attention to yoghurt. In April 2010, BBC Athens correspondent Malcolm Brabant reported on a Greek man suing the Swedish dairy company Lindahl for almost \$7 million for offending Greek national pride and identity. Company officials did not deny the firm's use of a Turkish yoghurt recipe, but they did not explain why they used the image of a traditionally dressed Greek in order to promote a Turkish-style product.<sup>4</sup>

Both these legal disputes show how much the alleged national origin of a seemingly ordinary food like yoghurt has been challenged. The cases beg the questions as to why an ordinary Greek felt compelled to sue a Swedish dairy company, why Bulgarians have insisted on international recognition of *their* Bulgarian yoghurt, and why the national identity of a foodstuff has generated such strong politics, national conflicts, and patriotic sentiments. Once an unknown and exotic food in the western diet, over the past century, yoghurt has become a globalized, a highly standardized, and an extremely popular product.

To understand the historical evolution of yoghurt as a national symbol, this article explores how Bulgarian yoghurt has come to signify an authentic foodstuff and how it has come to represent a taste of Bulgaria, its homeland. Home is thus interpreted as an imagined place, a place that surfaces by means of discourses made up of geographical indications that imply a process of meaning-making. I will trace the diffusion and appropriation of Bulgarian yoghurt's technology in what social actors have defined as Western Europe.<sup>5</sup> In particular, I will examine how a food product can be constructed as typically Bulgarian with unique characteristics, distinguishing it from Greek or Turkish yoghurt. To explore these issues, this article investigates how, when, why, and by whom yoghurt became to be perceived as Bulgarian, i.e. what I call the Bulgarianization of yoghurt. The analysis focuses on the authentication of Bulgarian yoghurt by addressing its various economic, social, and cultural dimensions. Moreover, this article seeks to understand the various aspects linked to the exchange of food across national borders and how Bulgarian yoghurt's globalized production and distribution caused cultural adjustments in various and new cultural contexts. By studying Bulgarian yoghurt from a historical perspective, this article not only offers insights into processes of food authentication but

also into those of nutritional transfers, the spread of food technology and consumption patterns, and how these were adopted in and adapted to new localities.

## LITERATURE, SOURCES, AND METHODOLOGY

Food, as shaped by culture, ethnicity, and geography, plays an important role in constructing national identity. Recent food studies pay particular attention to the phenomenon of food authentication on which I base my approach to Bulgarianization. Pioneers in researching the importance of food in the formation of collective identity, anthropologist Arjun Appadurai and sociologist Erik Cohen demonstrated in the 1980s that authenticity is a modern creation. They related authenticity to the modernist concepts of uniqueness and individualism.<sup>6</sup> In 1981, Appadurai advanced the idea of food as “a highly condensed social fact” that acts as “a marvelously plastic kind of collective representation.”<sup>7</sup>

During the 1990s and well into the twenty-first century, the relationship between food, identity, and authenticity became a topic of further discussion. Sidney W. Mintz and Christine M. Du Bois's recent work dedicated to the anthropology of food reflects on the embodied values of food, which they present as both constructed and constructing. Defending food studies, the authors concluded that research on food has “illuminated broad societal processes such as political-economic value-creation, symbolic value-creation, and the social construction of memory.”<sup>8</sup>

Furthermore, a large number of researchers have defined food authentication mostly as a result of diverse economic and technological efforts, and have identified specific characteristics of authentic food, i.e. it must be original, genuine, real, and true.<sup>9</sup> I build on these theoretical frameworks in my analysis of the relationship between the concept of authenticity and the perception of home. The above-mentioned researchers have avoided making such parallels that, I believe, would broaden the understanding of authenticity and home. The idea of home as a place of authenticity is especially tangible in relation to food and taste. The essential role homemade food, with its professed distinctive taste, plays in one's perception of safety, belonging, and rootedness is widely recognized by social scientists.<sup>10</sup> Home and authenticity both refer to a specific locality and an emotional bond. Recent marketing and food studies do not miss the contrast between authentic, healthy, and genuine homemade food on the one hand and standardized, mass produced, industrial products on the other.<sup>11</sup> According to Conrad Lashley, Alison Morrison, and Sandie Randall, “preconceptions of home and family are used as an authenticity baseline when comparing and contrasting domestic and commercial.”<sup>12</sup> As Sharon Hudgins' study showed, however, “the sense of culinary authenticity is a matter of people's own personal taste memory.”<sup>13</sup> David Sutton's *Remembrance of Repasts: An Anthropology of Food*

*and Memory* elaborated on the embodiment of culture, food, and memory<sup>14</sup> and finds that the memory of taste and smell played a crucial role in the remembrance of home. Sutton thus identified a close relationship between memory, home, and taste.<sup>15</sup>

By investigating the ways in which the concept of authenticity is constructed, this article wishes to tackle its relationship with taste, place, and identity. The examination of how Bulgaria became considered as yoghurt's homeland reflects on how values are embodied in place in order to mark it as the authentic home of a specific food. Taste is after all connected to a specific place and to technological knowledge. The concept of home refers to a specific locality both as a physical structure and a symbolic construction. In the context of the connection between authentic products and specific locality, this article looks at the regionality of food as related to the home-made and genuine. Locality is studied as a place with "its own local culinary customs, established through immemorial customs and steeped in time."<sup>16</sup> Anthropologist Richard Wilk identified the early period of globalization as "responsible for the very *invention* of our ideas of local culture, local nature, *terroir* and all cultural superstructures like cuisine which have been erected around them."<sup>17</sup> The deconstruction of the attributed Bulgarianess to yoghurt is an attempt at tracing the very invention of the authentic local food. The article traces not only how "taste(s) of home(s)" were invented but also how they spread and became part of local taste elsewhere, a process where the forces of neophilia and neophobia interacted with the processes of food (de)localization, authentication, and technological transfer.<sup>18</sup>

Research done by historian Barbara Orland on the development of the European butter market provides an excellent example of how products, once considered local, are popularized in a new locality, as was the case for yoghurt. Orland suggested that the globalization of the dairy market, resulting from a scientific revolution, enabled the so-called delocalization of dairy products.<sup>19</sup> Her understanding of delocalization is related to the transfer of food products and their production outside of the locality in which they originate. In the context of this special issue, delocalization can be considered as the process of leaving an imaginary home and spreading food, production techniques, and consumption patterns so that they become part of taste elsewhere. In that regard, this article defines home in terms of a particular locality that is characterized by uniqueness. It differs from the realm of industrial production and relates to the notion of authenticity. According to Orland, the delocalization of food also brought standardization of transferred goods and technologies that enabled their production in different cultures and localities.<sup>20</sup> Similar processes brought yoghurt to the European table but also resulted in the standardization and industrialization of yoghurt's production.

The concept of delocalization marks the process of displacement when local products become considered as national once they start traveling.

However, it also implies the idea of locality showing how food and taste are bound to specific places, cultures, peoples, technological specifications, and traditions—all categories that suggest intimacy with home or homeland. Delocalization might be considered as the only act of leaving the home culture, a traveling made possible by the scientific discoveries that enabled food production beyond the locality from which it originated.

Food scholar Fabio Parasecoli's research is useful in tracing the displacement of yoghurt as a local product with distinguished taste and production techniques. He argued that local identity is generated by the exchange that occurs when differences become defined; the formation of gastronomic identity needs to be seen from within the relationship to Otherness.<sup>21</sup> A dish can only be considered local or typical if that particular good is included in trade and exchange. His approach shows that "until a product is consumed exclusively in its place of origin, it is not perceived as unique or specific to that particular location; it is just common food for those who produce it. On the other hand, when it becomes available to travelers or it is distributed elsewhere, its local and traditional traits acquire visibility for other communities."<sup>22</sup>

In order to trace the process of yoghurt's Bulgarianization in the first two decades of the twentieth century, I have mobilized various types of sources. As the problems of identity and image creation are central to my research, I have concentrated on the use of qualitative methods that combine content and data analysis of visual and textual sources. The main sources used were the international and national medical, dairy, health, and trade-related journals. Those specialist and popular science journals were selected because they offer the best insights into how professionals discussed the appearance of new food products. They were invaluable sources especially for the understanding of the processes of the popularization of yoghurt from the 1900s to the 1920s. On the pages of those journals, physicians, microbiologists, nutritionists, and chemists revealed themselves as key actors for yoghurt's justification or rebuttal. Travelogues of European travelers in Balkan lands and the Ottoman Empire were other useful sources analyzed here in order to understand how yoghurt's local and traditional traits acquired visibility in broader European communities and how exoticism linked to Balkan culinary traditions became a marketing strategy for yoghurt. Finally, advertisements were also analyzed under the guise of commercial posters, stamps, and postcards that shed light on the social and cultural patterns that influenced the circulation of meanings embodied in yoghurt.

#### ELIE METCHNIKOFF: "APOSTLE OF LONGEVITY"<sup>23</sup>

Ilya Ilych Metchnikoff (1845–1916), more popularly known as Elie Metchnikoff, was a Russian biologist and founder of the science of

immunity. His many research interests included the beneficial effects of yoghurt, which he explored in the first decade of the twentieth century. His reputation as a distinguished bacteriologist, affiliated with one of the most important science centers in Europe, the Pasteur Institute in Paris, shaped public response to and the impact of his theories. Indeed, Metchnikoff was not only celebrated as a scientist but was also well known by the reading public of popular science. As of 1900, he studied how the human body could destroy harmful microorganisms. He focused his research on the scientific understanding of the aging process. He devoted himself to the difficult but popular question of uncovering how one might influence or postpone changes in the human body. His research and philosophical musings on aging and intestinal decomposition resulted in two popular science-based books written for a larger audience beyond the science community: *Etude sur la nature humaine. Essai de philosophie optimiste* (translated into English in 1905 as *Nature of Man, Studies in Optimistic Philosophy*) published in 1903 and *La Vieillesse (Old Age)* a year later.<sup>24</sup> In exploring aging, Metchnikoff borrowed from French surgeon Louis René Villermé the idea of physiological changes as a social disease. In *Essais optimistes* (translated into English in 1907 as *The Prolongation of Life*), he similarly applied the medical insights to human behavior, putting forward the idea that one's lifestyle might prevent certain health problems, a scientific notion that remains with us today.

After systematic research in his laboratory at the Pasteur Institute from 1905 to 1906, Metchnikoff hypothesized that decomposition in the gastrointestinal tract of humans generated a secretion of toxic components. Metchnikoff believed there was a rich source of harmful microbes, intestinal flora in particular, which inhabited the body. He argued that the large intestine was a large waste reservoir in the process of digestion, suggesting that the organ was useless to humans.<sup>25</sup> Metchnikoff suggested beneficial microorganisms should be introduced to the colon in order to fight the toxicity. The popularity of Metchnikoff's research on auto-intoxication developed in tandem with widespread intestinal problems occurring in European cities: Urban residents were experiencing diarrhea, constipation, and intestinal infections in the rapidly growing and overcrowded cities.

Metchnikoff took a particular interest in yoghurt consumption as an alternative treatment for intestinal discomfort. In the late 1900s, the scientist put forward the hypothesis that the regular consumption of yoghurt and fermented milk would positively affect the intestinal micro-flora and save the human organism from auto-intoxication by reducing or even eliminating decomposition.<sup>26</sup> Metchnikoff came to believe that although the consumption of any kind of fermented milk was desirable, sour milk was the most preferable of all. In his quest to unlock the answer to what made people age and how life could be prolonged, he became interested in fermented milk and in the work of one young researcher, Stamen Grigoroff, in particular.

Like other researchers of fermented milk, he used the terms “sour milk” and “yoghurt” interchangeably.

Metchnikoff's promotion of yoghurt as a treatment for a number of intestinal problems generated an interest in his research from both scientists and the reading public of popular science. What made his theories unique was that he connected the therapy of intestinal problems to the idea of longevity; he argued that the magical cure to improve one's health and prolong one's life was sour milk. In 1907, Metchnikoff's work introduced specific details about sour milk relating to longevity and locality.<sup>27</sup> He used data from German scientist Bernhard Ornstein and demographer M. Chemin. Both works showed an elevated number of extremely old people in Greece, Serbia, Bulgaria, and Romania.<sup>28</sup> The numbers he found in the unpublished work of Chemin showed that, “in 1896, there were more than five thousand centenarians (5.345).”<sup>29</sup> Metchnikoff claimed that he assumed the numbers were probably exaggerated.<sup>30</sup>

In understanding the longevity of Bulgarian peasants, he also claimed that Bulgarian scientist Stamen Grigoroff had introduced him to the phenomenon of Bulgarian centenarians. As his research traced the relationship between nutrition and overall health, he was intrigued by Grigoroff's research, which directed his attention to the Bulgarian people and their lifestyle.<sup>31</sup> When Metchnikoff published concrete data on the number of centenarians in Bulgaria, he singled out their simple lifestyle and consumption of large amounts of yoghurt on a daily basis.<sup>32</sup> Unfortunately, neither of his studies explained how he collected the information on Bulgarian habits. Perhaps more significantly, Metchnikoff established a connection between Bulgarians—people, who lived healthily and attained a ripe old age—and their diet. In this connection, Bulgarian yoghurt featured prominently.

Metchnikoff advised the regular consumption of fermented milk products, which became popular as the sour milk or *bacillus bulgaricus* treatment. His theories were widely adapted between the 1910s and 1920s by the public at large. People who followed Metchnikoff's work with great passion became interested in getting the “elixir of long life,” as yoghurt became branded. The claim helped lactobacillus cultures to widely and quickly gain in popularity. Yoghurt combined the cultural authority of a scientific discovery with people's desire for longevity and established a new European fashion. I now turn to the role of the research of a young scholar, Stamen Grigoroff, in the popularization of Bulgarian yoghurt as the elixir of long life.

## METCHNIKOFF, STAMEN GRIGOROFF, AND BULGARIAN BACILLUS

In 1905, the 29-year-old Bulgarian physician Stamen Grigoroff (1878–1945), assistant of the prominent French bacteriologist Vincent Massol, was involved in conducting experiments at the Medical University of Geneva. His research

led to the discovery of the lactic acid bacillus, the very component that transformed milk into yoghurt.<sup>33</sup> From 1904 onwards, Grigoroff focused on isolating the microorganism that caused the fermentation of Bulgarian sour milk. He worked with samples of sour milk, which he brought from his native village, Studen Izvor, near the town of Trun.<sup>34</sup> After a year of experiments, Grigoroff discovered three different microorganisms and named them *Bacille A*, *Microcoque B*, and *Streptobacille C*.<sup>35</sup> *Bacille A* was a small rod, which caused milk to curdle and turn into yoghurt. Grigoroff referred to this microorganism as “*lactic acid bacillus*.”<sup>36</sup> The other crucial bacterium was categorized as *streptococcus* later named by the scientific community *Streptococcus thermophilus*. In the same year, Grigoroff published a full description of his scientific discovery of the lactic acid bacillus in the scientific journal *Revue Médicale de la Suisse Romande*.<sup>37</sup> The real achievement, however, was that Grigoroff identified the precise agent responsible for yoghurt production. The discovery of that microorganism enabled further research of its activity. While Metchnikoff’s interest in the prolongation of human life and research had provoked a number of discussions that made yoghurt fashionable, the discovery of the exact agent of milk fermentation made his theory about disintegration and longevity more concrete and thus sparked his interest. Grigoroff’s supervisor, Professor Massol, informed his colleague Metchnikoff about Grigoroff’s discovery. In response, Metchnikoff invited the young Grigoroff to give a lecture at the Pasteur Institute.<sup>38</sup> Accordingly, the Bulgarian scientist reported on the discovery of the lactobacilli during this lecture. For the purposes of scientific demonstration, he brought a bowl of Bulgarian yoghurt produced in the laboratory and a microscope to display the isolated microorganisms. After his presentation, Grigoroff gave Metchnikoff a present—the traditional container to store yoghurt, *rukafka* (*ръкамка*)—as a sign of respect for the famous scientist. Metchnikoff assigned his lab assistants to independently confirm Grigoroff’s discovery and to report the results to the Scientific Council of the Pasteur Institute. Metchnikoff discussed these lab procedures in his books *Essais optimistes* (*The Prolongation of Life*) and *Quelques Remarques sur le Lait Aigri* (translated into English in 1907 as *Scientifically Sour Milk: Its Influence in Arresting Intestinal Putrefaction*).<sup>39</sup>

Metchnikoff, together with his lab assistants, carried out a number of experiments in his laboratory and concluded that not all lactic acid bacteria had the same effect on the intestinal micro-flora. The anti-putrescent action of the lactic fermentation depended on the production of lactic acid by those microbes.<sup>40</sup> He indicated that different types of lactobacillus did not have the same effect and that Bulgarian bacilli had the most beneficial effect on health.<sup>41</sup> Grigoroff had provided Metchnikoff with external evidence and had observed longevity in the peasants but without any evidence to why this was the case. He surmised that there was a connection between yoghurt consumption and Bulgaria’s centenarians and thus established a

link between yoghurt and Bulgaria. Metchnikoff suggested that yoghurt and fermented milks might be the foods that delay the process of aging. Grigoroff's information about the long-living Bulgarian peasants, who consumed large quantities of yoghurt, added a new factor in Metchnikoff's hypotheses about the connection between yoghurt and aging: Bulgaria. Metchnikoff supported the link between longevity, yoghurt, and Bulgaria with statistical data that even he considered not entirely reliable yet sufficient to display the connections suggested by himself and Grigoroff. Metchnikoff's ideas on longevity were presented in popular national and local newspapers dealing with politics and economics as well as with issues on health and culture.

### TASTE OF EXOTICISM

Metchnikoff was not the first person to introduce fermented milk to a European audience. By the late nineteenth century, fermented milk products from various parts of the world, like *kefir*, *kumiss*, and yoghurt, were introduced to the European market. In his book on the dairy industry published in 1891, René Lézé described *kumiss* and *kefir*.<sup>42</sup> A study of travelers' diaries shows how the French reading public had come to know yoghurt even earlier. One volume of *Histoire de l'Empire Ottoman*, covering the 1720s and 1730s but published in 1839, listed the daily food provisions for the Austrian ambassador, Count Vitmont, in Constantinople as including "10 okkas de yoagourt (lait caillé)."<sup>43</sup> French traveler Bertrandon de la Broquière reported he had consumed yoghurt in Constantinople in 1832, when he had been offered "un grand bol de lait caillé qu'ils appellent yogourt [a large cup of sour milk called yoghurt]."<sup>44</sup> These stories show how on various occasions Europeans had sampled yoghurt or sour milk, even though their fragmentary knowledge did not generate a European interest in consuming yoghurt.

The development of scientific knowledge for a starter culture selection enabled the production of yoghurt in places without the typical microflora.<sup>45</sup> Despite the existing microbiological and technological differentiations, people associated the sour milk or yoghurt with an exotic origin. Besides travelers, scientists associated the product as originating from the distant food cultures of the Ottoman Empire and the Balkan Peninsula's population. Sour milk's popularity was also apparent in the urban consumers' search for new flavors and textures.

When Metchnikoff offered his theories of yoghurt arresting the aging process, he provided the consumption of fermented milk with a scientific rationale. A science-based solution for a popular health and longevity issue was a powerful motive for many consumers to include an exotically labeled food in their daily diet. When it first appeared on French, British, and Dutch markets, yoghurt was unknown and unpopular. To make yoghurt commercially viable, entrepreneurs needed a marketing strategy.<sup>46</sup> Its success depended

not only on adapting the manufacturing technology but also on reshaping French, British, German, Spanish, and Dutch consumers' expectations. Advertising was needed to tempt consumers to start eating an unfamiliar food product. As sociologist Faustine Régnier claimed, if consumers are to be persuaded to buy new and unfamiliar foodstuffs, a key strategy is to persuade them that the exotic product "has significant therapeutic virtues."<sup>47</sup> Claude Fischler, another sociologist, highlighted the role medical experts play in the process of justifying the need for new foodstuffs. He even insisted that medical experts have taken possession of the menu.<sup>48</sup> Following Fischler's definition in this regard,<sup>49</sup> Régnier postulated the inseparable link between food and health, arguing that "by incorporating a foodstuff, the consumer eats its properties, in particular its virtues, real or imaginary, when the food is regarded as positive"<sup>50</sup> and, I could add, when it is perceived as harmless.

Metchnikoff's theories of yoghurt associated the foodstuff with health benefits. Scientists and the broader public were thus interested in yoghurt's healthy influence, yet it remained an exotic product. This posed a challenge for those interested in marketing. Scholarly and popular books on fermented milk published between 1907 and 1911 often included a historical overview of the consumption of yoghurt.<sup>51</sup> In 1907, Metchnikoff, and several authors a few years later, claimed that yoghurt consumption was known from time immemorial. In 1908, scientists Adolphe Combe, Albert Fournier, and William Gaynor States argued in their collaborative book *Intestinal Auto-Intoxication* that yoghurt "goes back to the most remote periods."<sup>52</sup> A similar assumption was put forward in two other books intended for both a professional and a popular audience: *Maya Bulgare. Étude sur le yoghourt ou lait caillé bulgare obtenu par la maya ou ferment bulgare*, published by La Société de la Maya Bulgare in 1910, and *The Bacillus of Long Life* (1911) by nutrition specialist Loudon M. Douglas.<sup>53</sup> The authors traced stories of the use of fermented milk through legends and documents going as far back in history as possible and referring to nomadic traditions in Central Asia, the Bible, and Ancient Egypt, Greece, and Rome.<sup>54</sup> Many authors sought to convince readers that the novel product actually had a remarkably long cultural and therapeutic history. One particular story circulated about the French Emperor Francis I. Around 1908, the books dealing with yoghurt production and consumption began relating a legend about the emperor suffering from some kind of intestinal disease, which doctors were unable to cure.<sup>55</sup> Fournier, Combe, and States reported, on the basis of research by French explorer Xavier Dybowski, that the emperor's ambassador to the Ottoman Empire recommended a Jewish doctor from Constantinople, who prescribed medical treatment with curdled milk. The doctor, so the legend went, prepared the sour milk from the milk of the ewes he had brought along but kept its preparation secret. Miraculously, Francis I rapidly regained his strength.<sup>56</sup>

Every story about yoghurt in Western Europe depicted it as an exotic product with rationally proven therapeutic virtues. History came to support

scientific authority in favor of normalizing yoghurt.<sup>57</sup> Régnier claimed that the contemporary public evaluation of an exotic food as being good for one's health gives that product a "degree of social prestige."<sup>58</sup> The trade and popular press further reinforced the producers' advertising campaign to develop yoghurt's appreciation. Emphasizing the beneficial effect on the intestines at a time when gastric problems were common is an example of these advertising strategies. The connection between sour milk and longevity offered one more argument for anyone asking, "Why should we buy that strange product?" Scientists, entrepreneurs, and journalists were the social actors promoting this new and unfamiliar foodstuff. The scientists who popularized the benefits of yoghurt consumption were crucial for its public acceptance, as were the images offered by advertising campaigns. These enabled consumers to overcome food neophobia provoked by unfamiliar or unusual food.<sup>59</sup> One solution to potential neophobia was the guarantee by trusted authorities that sour milk was not only harmless but also had a significant therapeutic effect. French physician P. Guéguen discussed medical cases for sour-milk treatment. In a 1909 article, he described health-care professionals as contributors to the popularization of sour milk.<sup>60</sup> Physicians were significant mediating actors between science and the public; they frequently recommended the sour-milk or *Bacillus bulgaricus* therapy against widespread intestinal disease. As the public accepted the experts' knowledge and expertise, their recommendation of yoghurt consumption, as Régnier concluded, "made it possible to introduce new products with less fear since the medical opinions validated the health benefits of the exotic."<sup>61</sup> Pharmacists, too, became important mediators in the yoghurt distribution chain. The product sold by pharmacists and dairy shop entrepreneurs was produced according to the same technology. It was the same product but distributed through two different channels. Pharmacists were part of that distribution chain. They delivered or even produced yoghurt that physicians prescribed to their patients. A discussion published in the *Therapeutical and Pharmacological Section* of the *British Journal of the Royal Society of Medicine* (1910) underscored pharmacists' role in yoghurt distribution and quality control. The journal included the reflections of the bacteriologist William Bulloch and medical doctors Vaughan Harley, Arthur Hertz, and Gordon Lane on the therapeutical nature of the lactic acid bacillus. These specialists also mentioned pharmacies as outlets where a variety of yoghurt tablets were sold.<sup>62</sup>

With the approval of these socially respected actors, the unfamiliar and exotic product was decreasingly seen as a harmful foodstuff. Metchnikoff's theories confirmed by other scientists encouraged doctors to recommend the consumption of yoghurt as a treatment against various diseases causing intestinal discomfort. In this way, an overwhelming demand for the "elixir of life" was established. Milk producers and dairy chemists also made the product attractive to the general public. British physician George Herschell identified the process of the popularization of yoghurt and lactobacilli

consumption in the UK: “Chemists by means of papers of clinical indications taught the medical men how to implant sour milk and lactic ferments to their practice. Both milkmen and chemists manufactured sour milks that doctors promoted to their patients.”<sup>63</sup>

Yoghurt was not only accepted because of successful marketing and scientific approval; colonial practices likewise encouraged middle-class European curiosity in new food experiences. The colonies provided new foreign foods and taught consumers to be more open to novelty, thus generating neophilic feelings. Philosopher Lisa Maree Heldke advanced the idea that modern Western colonizing society was characterized by “an obsessive attraction to the new, the unique, the obscure, and the unknown.”<sup>64</sup> The author saw “new” in relation to the colonizers’ desire for “new territories, new goods, new trade routes, and new sources of slaves...”<sup>65</sup> Yoghurt’s popularity can be seen as an aspect of the desire in France, Great Britain, Germany, and the Netherlands for new flavors and textures.

The Balkan region, despite geographically belonging to the European continent, was considered as oriental as the Ottoman Empire. In his 1927 book *Les voyageurs orientaux en France*, Nicolae Iorga gave a very good sense of French people’s attitudes towards the Balkan region during the late nineteenth and the early twentieth century.<sup>66</sup> Everything Turkish was pittoresque: “*Le vrai Oriental, c’est le Turc de l’ancien régime, le Turc à turban, à vêtement large, à babouches, le Turc qui arrive avec toute sa turquerie vestimentaire et verbale, avec tout ce qui constitue son aspect pittoresque* [The real Oriental is the Turk of the old regime. The Turk wearing turban, loosed garment, and babouches slippers. The Turk that arrives with its entire clothing and verbal Turkishness with everything that constitutes its picturesque appearance].”<sup>67</sup> The five centuries of Ottoman governance in the Balkans had been responsible for a multi-national and multi-religious political constellation. Iorga defined oriental as something non-occidental. As he put it, Orientals were unfamiliar with the “*notion de progrès, cette conception dominante du monde occidental, ce point cardinal d’un développement qui n’existe pas pour l’Orient* [the notion of progress, a dominant concept for the occidental world, this fundamental point of development that does not exist in the Orient].”<sup>68</sup> Besides, Iorga articulated what appeared to Europeans as different and unfamiliar things and people, thus provoking curiosity and stirring romantic feelings: “[b]ientôt les romantiques chercheront en Orient de la lumière, de la couleur, des choses nouvelles, attachantes par ce caractère même de nouveauté, des choses bizarres et chatoyantes. [Soon the romantics will seek the Orient of the light, the color, the novelties, engaging precisely because of their novelty, peculiarity, and glimmering].”<sup>69</sup> This romanticized vision of the Orient contributed to yoghurt’s representation as an exotic food.

Consumers’ curiosity for new food experiences, combined with the work of scientists and marketing of producers, imbued yoghurt with new meanings. From an ordinary daily food accessible to everyone, as was the case in

the Balkans, yoghurt turned into a medicine, a tool in the hands of polemical nutritionists and doctors propagating healthy food and a healthy lifestyle. Moreover, the healthy aspects were marketed by means of exoticism, linking yoghurt with an exotic Ottoman history. How, then, did yoghurt become associated with Bulgaria as its homeland, i.e. how did yoghurt become Bulgarianized?

## CONSTRUCTING AUTHENTIC BULGARIAN YOGHURT

Not surprisingly, yoghurt producers embraced the idea and encouraged the perception of yoghurt as a healthy, exotic food. The scientific arguments of quality and beneficial effects first introduced by Elie Metchnikoff in 1907 were employed by the market, as was the statement of Bulgaria as yoghurt's homeland. In 1908, Fournier, Combe, and States had stressed the superiority of Bulgarian sour milk compared to similar products but did not distinguish it as exclusively Bulgarian; instead they presented it as a Balkan and Turkish product, although they did point out that, "[t]he best known and most studied of all the oriental curdled milks is the Bulgarian curdled milk or yoghurt. This is especially used throughout European and Asiatic Turkey, in Greece, Montenegro, Serbia and Bulgaria."<sup>70</sup> In 1909, Adolphe Combe had argued that, "[t]he coagulation in this preparation is due to a special ferment called Maya."<sup>71</sup> These scientific treatises from 1909–1910 did not clearly explain the distinction between Bulgarian sour milk and the other yoghurt-like products from the region, despite the fact that Metchnikoff had implied it was based on Grigoroff's research. Nevertheless, in 1909–1910, Bulgarians were perceived as a healthy and long-living people, a perception found in the scientific journals and public press of that time. Thus, a tendency to refer to Bulgaria in yoghurt-related marketing developed, even if Bulgarian yoghurt became synonymous for an entire range of yoghurt products.

This direct association with Bulgaria was first established by Metchnikoff, as I have mentioned, but it then became a notable characteristic as the product's definition published in the 1923 edition of the prominent French dictionary *Larousse* testified. Yoghurt or *yogourt* was: "*lait caillé, qui constitue l'un des principaux aliments des montagnards bulgares. Utilisé en médecine dans le régime alimentaire des sujets atteints de problèmes gastro-intestinaux, ou digérant mal le lait. On dit aussi yaourt, yabourt* [sour milk is one of the main foods of the people living in the mountains of Bulgaria. It is used in medicine for patients with gastrointestinal problems or who have difficulty digesting milk. It is also known as *yaourt, yabourt*]."<sup>72</sup> The Bulgarian sour-milk label was used to refer increasingly to both a specific product and a generalization for all yoghurt-like fermented milks containing *Lactobacillus bulgaricus*, i.e. the agent responsible for the distinctive sour taste of the yoghurt. For example, in 1933, French microbiologist

Fernand Corminboeuf highlighted two characteristics of Bulgarian yoghurt: the health benefit and the traditional character. He pointed out that, “*le nom bulgare Yoghourt veut dire ‘lactic acide de digestion facile.’ Ce dernier produit était, selon la tradition ancienne, utilisé couramment comme préventif de nombreuses maladies. . .* [The Bulgarian word *Yoghourt* means ‘lactic acid for easy digestion.’ According to ancient tradition, this product was commonly used to prevent many diseases. . .].”<sup>73</sup>

Aside from the influence of Metchnikoff’s writings, why did Bulgaria become such an important factor? Why did the notion of Bulgarian yoghurt assimilate different ethnic products and referred to a single homeland? A possible explanation was that until the late nineteenth century, parts of the Balkans belonged to the Ottoman Empire. The five-centuries-long political domination of Turkey influenced the external understanding of the various nationalities shaping the Empire. From a Western European perspective, even after the independence of some Balkan countries from the Ottoman empire, those new states were considered to have similar characteristics to their former rulers and were often seen in opposition to Western Europe.<sup>74</sup> In that sense, the typologization of the region was transferred to the food-stuff, and it was presented as identical. Yoghurt was common in Bulgaria, Greece, and Turkey, but for many Europeans, the local variants were difficult to distinguish and, therefore, they considered the different products to be one and the same. Bulgarian yoghurt became a *pars pro toto* for different products in the Balkan region, but this does not explain why Bulgaria was acknowledged as yoghurt’s home. The reasons were partly geographical but really had more to do with the belief that yoghurt was an elixir of longevity.

In 1910, three years after Metchnikoff’s *Essais optimistes*, the *New York Daily Tribune*, alerted to the old Bulgarians he mentioned, published a brief item about the oldest woman in the world. The newspaper said she came from Bulgaria. Baba Vasilka, who was born in May 1784 in the little Bulgarian village of Pavelsko, had apparently beaten by one year “the claim by Frau Dutkiewitz of Posen, born in 1785, to be the oldest woman in the world.”<sup>75</sup> The article provided the record of Vasilka’s birth certificate that was kept in a neighboring orthodox monastery. She was presented as “the daughter of a peasant, and worked as a peasant up to a comparatively recent date. For more than a hundred years she worked regularly in the fields.”<sup>76</sup>

A year later, British dairy and nutrition specialist Loudon M. Douglas printed a picture of Baba Vasilka, presenting the 126 year-old as “the oldest woman in the world” in the introduction of his book, *The Bacillus of Long Life*. The picture also showed Vasilka’s son Todor, whom the author described as “a youth of 101 years, active and vigorous.”<sup>77</sup> Following Metchnikoff’s suggestive claims about Bulgarian yoghurt, he directly attributed to yoghurt the cause of the longevity of Baba Vasilka and her son as “typical examples of people who live to a great age by the use of sour milk, as it has been their principal food all their lives.”<sup>78</sup> Douglas argued that in Bulgaria, “the majority



THE OLDEST WOMAN IN THE WORLD AND HER SON

Baba Vasilka is 126 years old, and her son Todor is 101. They are peasants, and have lived all their lives in a little village in Bulgaria. They are typical examples of people who live to a great age by the use of soured milk, as it has been their principal food all their lives.

**FIGURE 1** A picture of the 126 year old Baba Vasilka and her son Todor. Source: Douglas Loudon, *The Bacillus of Long Life: A Manual of the Preparation and Souring of Milk for Dietary Purposes* (New York: G.P. Putnam's Sons, 1911): i. Reproduced with permission.

of the natives live to an age considerably in excess of what is recognized as the term of life amongst Western nations, and inquiry has disclosed that in the Eastern part of Southern Europe, amongst a population of about 3 million, there were more than 3,000 centenarians found performing duties.”<sup>79</sup> The author stated that it is quite common “to find amongst the peasants who live to such a large extent upon sour milk, individuals no younger than 120 years of age.”<sup>80</sup>

As a 1921 article showed, longevity continued to remain one of the established connotations of Bulgarian yoghurt. American microbiologists at Yale University, Leo Rettger and Harry Cheplin, stressed that “[n]umerous instances are on record where persons lived and retained much of their early vigor to a very old age particularly in Bulgaria, and where from all appearances they owed their long life to sour milk, which was their staple, and in many cases practically the only diet.”<sup>81</sup> The authors reinforced the already popular perception of Bulgarians as healthy and long-living people that was the subject of discussions in scientific journals already in the late 1900s public media.

The recognition of Bulgaria as the land where yoghurt possibly originated was further exploited throughout marketing, i.e. produced in dairy workshops and pharmacies that dominated the market. For instance, in the 1900s and 1910s, the French brand *La Maya Bulgare* (The Bulgarian Maya) was an excellent example of attributing Bulgarian origin to yoghurt, thus referring to the country as yoghurt’s homeland. In the 1900s, *La Société de la Maya Bulgare* led the French market, producing yoghurt and starter cultures as well as publishing materials to promote the novelty.<sup>82</sup>

In its 1908 leaflet advertising dry yoghurt ferments, the company connected their product to Bulgaria to persuade potential consumers to buy their lactobacilli. Convinced of the effectiveness and power of this message to convey the sense of locality, the company simply headlined it *La Maya Bulgare*. The company and product names were written at the top of the leaflet, followed by the Bulgarian coat of arms and a small crown—symbols of the Bulgarian kingdom. *La Société de la Maya Bulgare* believed that directly relating their product to Bulgaria was all the advertising needed to sell their product, a strategy that could only succeed if consumers already had a clear understanding of the connection. Taking into account the extreme popularity of Metchnikoff’s ideas of longevity as well as the *bacillus bulgaricus* treatment, the hidden messages were probably crystal clear: Bulgaria was presented as yoghurt’s home-land.

More than twenty years later, Dutch dairy producer *HET* had a similar advertising strategy, showing how the market had moved further north. In the 1930s, the company used the picture of a healthy looking old man with a long beard and traditional costume—thus sending clear messages of Orientalism that were already becoming clichés used in the 1910s advertisements of the Swiss dairy company *Nestlé* and Munich-based *Paskal jogurt*.<sup>83</sup>



**FIGURE 2** Leaflet “La Maya Bulgare.” Source: Bibliothèque de la Musée des arts décoratifs, 256. (17) Adresses et prospectus publications, étiquettes, emballage (1908–1909). Reproduced with permission.

The man in the *HET* brochures supposedly looked like a Bulgarian playfully drinking yoghurt. That message was further underlined by the caption, “*Doet als de Bulgaren, drinkt yoghurt om uw jeugd te bewaren* [Act as the Bulgarians, drink yoghurt in order to preserve your youth],” encouraging the consumer to follow the Bulgarians’ example and drink yoghurt to preserve their youth. On another poster, the same person promoted the accessibility of the product, stressing the price and recommended daily consumption. A short text underlined the fact that 1 out of 650 Bulgarians was a centenarian, and according to Metchnikoff, the reason was Bulgarians’ everyday yoghurt consumption.

Moreover then, Bulgarian medical treatises that lauded yoghurt’s inherent characteristics, namely its sour taste and salutary effects on life longevity, instigated the Bulgarianization of yoghurt. These treatises inextricably linked these characteristics to Bulgaria and suggested that yoghurt’s typical taste



**FIGURE 3** Advertisement of HET. Source: Geheugen van Nederland, BG C17/323, “Doet als de Bulgaren, drinkt yoghurt om uw jeugd te bewaren,” <http://www.geheugenvannederland.nl>. Reproduced with permission.

emanated from its homeland. Scientists Metchnikoff and Grigoroff thus constructed a relationship between taste and home that became embodied by yoghurt. Thereafter, the Bulgarianization of yoghurt was continued by European advertisers and audiences who reproduced the connections between yoghurt’s characteristics and Bulgaria but who came to identify this relationship in terms of exoticism. Yoghurt was presented as an exotic food originating in distant Balkan food cultures, with Bulgaria being considered as a distant locality and home of a product with an untypical sour taste that would become its typical mark of authenticity.

## CONCLUSION

Yoghurt’s arrival on the French, German, British, Spanish, and Dutch markets began with Metchnikoff’s discovery that fermented milk consumption might benefit consumers’ health. Despite the rising popularity of Metchnikoff’s theories, introducing that new product in Central and Western European consumers’ diet was far more complex. Scientific research concluded that *Lactobacillus bulgaricus*, the basic bacteria in yoghurt composition, was not only the reason for its distinctive sour taste but also had a beneficial effect on human health, even though it did not establish the connection to longevity as such. Nevertheless, the assumption of yoghurt’s connection to healthy lives and longevity together with Western consumers’ attraction to the packaged image of exoticism enabled its popularization.

The homeland of yoghurt was associated with exotic characteristics originating from the distant food cultures of the Ottoman Empire and the Balkan Peninsula. Yoghurt’s home-land was presented in opposition to European urban and industrial centers: a rural place, where people were living simply, working hard using traditional, non-industrial technologies. Home implied traditions, in close relation with nature and in opposition to the modern urban lifestyle.

In Western Europe, yoghurt was depicted as an exotic product with rationally proven therapeutic virtues. Scientific authority enabled consumers to overcome food neophobia provoked by unfamiliar or unusual food. Medical opinions validated the health benefits provided by the exotic product, which normalized yoghurt and enabled the transfer from one home and culture to a new one. The delocalization of yoghurt related its leaving the home culture and its appropriation by Western European contexts. Displacement and appropriation were facilitated by colonial practices that lead consumers to be more open to novelty. Exoticism was presented as not belonging to the home and originating in a distant homeland, i.e. something unknown but also unique and obscure.

The attribution of exotic oriental authenticity fuelled successful marketing strategies, influenced by western understanding of the various nations comprising the former Ottoman Empire. Generalized oriental yoghurt was packaged with the story of its ancient origin, nutritive value, and long tradition, while the new scientific discoveries confirmed its beneficial effects. Even if dairy producers' marketing strategies created a strong image of an exotic oriental product, scientists and journalists singled out Bulgaria as a yoghurt country. Metchnikoff's suggestion that the high number of Bulgarian centenarians had yoghurt as their staple diet directed attention to the possible connection between yoghurt consumption and longevity. Adding visual weight to this theory of Bulgarian longevity was a picture of a 126 year-old Bulgarian woman and her 101 year-old son, which dairy and nutrition specialist Loudon M. Douglas used to illustrate his book in 1913. Entrepreneurs exploited these connections between Bulgaria and yoghurt in their marketing by simply transferring the well-established image of yoghurt as an exotic oriental food to what they claimed was Bulgarian yoghurt.

Yoghurt's introduction to a new milieu was a geographical displacement of the product that required a redefinition of homebound tastes by French, Britain, Spanish, German, and Dutch citizens, scientists, and producers. When the knowledge of yoghurt production was imported, it needed to be adapted to existing nutritive habits and technological achievements. This process of taste commodification led to yoghurt recontextualization and adaptation to new markets, consumers, and nutritive habits as well as to industrialized dairy production. The delocalization of yoghurt production called for powerful processes of reidentification and authentication of the foodstuff.<sup>84</sup> In the end, the delocalization of yoghurt made its dissemination and appropriation by other cultures possible, allowing them to transform a taste that was foreign into something familiar and part of home.

## NOTES

1. In accordance with the Trade-Related Aspects of Intellectual Property Rights Agreement, the geographical indications were those "which identify a good as originating in the territory of a

Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin." World Trade Organization, "Agreement on Trade-Related Aspects of Intellectual Property Rights," (World Trade Organization, 1994), [http://www.wto.org/english/docs\\_e/legal\\_e/27-trips.pdf](http://www.wto.org/english/docs_e/legal_e/27-trips.pdf).

2. Products like Basmati rice, Jasmine rice, Darjeeling tea, and others.
3. World Trade Organization, "IP/C/W/386 Implication of Article 23 Extensions," (Council for Trade-Related Aspects of Intellectual Property Rights, 8 November 2002).
4. iNEWP, "A Greek Face On Turkish Yoghurt Means Trouble," 2010, <http://inewp.com/?tag=anthanasios-varzanakos>.
5. Being cognizant of the ambiguity of the concepts Western, Eastern, and Central Europe as well as Balkan and Ottoman, this article focuses on social actors' definitions, adopting Johan Schot and Thomas Misa's approach of studying the Europeanization processes. Thomas Misa and Johan Schot, "Inventing Europe: Technology and the Hidden Integration of Europe," *History & Technology* 21.1 (2005): 1–19.
6. Erik Cohen, "Authenticity and Commoditization in Tourism," *Annals of Tourism Research* 15.3 (1988): 371–386; Arjun Appadurai, "Introduction: Commodities and the Politics of Value," *The Social Life of Things: Commodities in Cultural Perspective*, Arjun Appadurai, ed. (Cambridge: Cambridge University Press, 1986) 3–63.
7. Arjun Appadurai, "Gastropolitics in Hindu South Asia," *American Ethnologist* 8 (1981): 494.
8. Sidney W. Mintz and Christine M. Du Bois, "The Anthropology of Food and Eating," *Annual Review of Anthropology* 31 (2002): 99.
9. See Fabio Parasecoli, *Bite Me: Food in Popular Culture* (Oxford, New York: Berg Publishers 2008); Jeff Pratt, "Food Values: The Local and the Authentic," *Critique of Anthropology* 27 (2007): 285–311.
10. María Amelia Viteri, "Nostalgia, Food and Belonging: Ecuadorians in New York City," *Ethnicity, Citizenship and Belonging*, Sarah Albiez, Nelly Castro, Lara Jüssen, and Eva Youkhana, eds. (Madrid: Iberoamericana, 2011) 221–237; Lynda Johnston and Robyn, "Embodied Geographies of Food, Belonging and Hope in Multicultural Hamilton, Aotearoa New Zealand," *Geoforum* 43.2 (2011): 325–331; Miriam Helga Schach, *Rootedness and Mobility in International Indigenous Literatures* (Ann Arbor: UMI, 2008).
11. Marianne E. Lien, *Marketing and Modernity: An Ethnography of Marketing Practice* (New York: Berg, 1997).
12. Conrad Lashely, Alison Morrison, and Sandie Randall, "My Most Memorable Meal Ever! Hospitality as an Emotional Experience," *Culinary Taste: Consumer Behavior in the International Restaurant Sector*, Donald Sloan, ed. (Oxford: Elsevier, 2004) 181.
13. Sharon Hudgins, "In the Eye of The Beholder, on the Tongue of The Taster: What Constitutes Culinary Authenticity?," *Authenticity in the Kitchen*, Richard Hosking, ed. (Blackawton: Protect Books, 2006) 252.
14. David Sutton, *Remembrance of Repasts: An Anthropology of Food and Memory*, (Oxford, UK: Berg, 2011).
15. Sutton, 82–84.
16. Richard Wilk, "Difference on the Menu: Neophilia, Neophobia and Globalization," *The Globalization of Food*, David Inglis and Debra Gimn, eds. (New York: Berg, 2009), 189.
17. Wilk, 189.
18. On the concepts of food neophilia and neophobia, see Wilk, "Difference on the Menu."
19. Barbara Orland, "Milky Ways: Dairy, Landscape and Nation Building until 1930," *Land, Shops and Kitchens: Agriculture and Technology in Historical Perspective*, Carmen Sarasua, Peter Scholliers, and Leen Van Molle, eds. (Turnhout: Brepols, 2005) 229–32.
20. Orland, 229–32.
21. Parasecoli, 134.
22. Parasecoli, 134.
23. Dawbarn used the phrase to refer to Metchnikoff. In Charles Dawbarn, ed., *Elie Metchnikoff* (London: Mills & Boon Limited, 1915) 112.
24. Élie Metchnikoff, *Old Age* (Smithsonian Report, 1905) 533–50; Solaville, "Les Grandes Longévités," *La Revue Scientifique de la France et de l'Étranger: Revue des Cours Scientifiques* 1 (1881).
25. Metchnikoff, *Essais Optimistes* (Paris: A. Maloine, 1907), 197–98.
26. Metchnikoff, *Essais Optimistes*, 208–38.
27. Metchnikoff, *Essais Optimistes*, 238.
28. Metchnikoff, *Essais Optimistes*, 120.
29. Metchnikoff, *Essais Optimistes*, 120.

30. Metchnikoff, *Essais Optimistes*, 120.
31. Metchnikoff, *Essais Optimistes*, 228.
32. Metchnikoff, *Essais Optimistes*, 120.
33. A detailed bibliographical overview of Stamen Grigoroff's life and work is provided by Фондация "Д-р Стамен Григоров", *В началото бе родовата памет. Десет години утвърждаване. Фондация "Д-р Стамен Григоров"* (София: Университетско издателство "Св. Климент Охридски, 2005) ["Dr. Stamen Grigoroff" Foundation, *In the Beginning Was the Family Memory... Ten Years of Confirmation. "Dr. Stamen Grigoroff" Foundation* (Sofia: Universitetsko izdatelstvo "Sv. Kliment Ohridski", 2005)].
34. "Dr. Stamen Grigoroff" Foundation, *In the Beginning Was the Family Memory*, 94–95.
35. See Stamen Grigoroff, "Etude sur un lait fermenté comestible. Le 'Kissélo-Mléko' de Bulgarie," *Revue Médicale de la Suisse Romande* 25.10 (1905): 714–21.
36. Grigoroff, 714–20.
37. Grigoroff, 714–20.
38. According to "Dr. Stamen Grigorov" Foundation, "The Bulgarian Name of Longevity. A Hundred Years from the Discovery of *Lactobacillus Bulgaricus*" (Sofia: "Dr. Stamen Grigorov" Foundation, 2005) 22–23.
39. Metchnikoff, *Essais Optimistes*, 232.
40. Metchnikoff, *Essais Optimistes*, 217–18.
41. Elie Metchnikoff, "Quelques mots sur le lactobacille," *Comptes rendus de l'Académie des Sciences* (Paris, France: l'Académie des Sciences, 1908).
42. See René Lezé, *Les industries du lait* (Paris: Firmin-Didot et Cie, 1891).
43. "Okka" is usually spelled in English as "oka" and was a measure of mass equal to 1.28 kilograms. See Joseph Hammer-Purgstall, ed., *Histoire de l'Empire Ottoman: depuis son origine jusqu'à nos jours. Depuis le traité de paix de Passarowicz jusqu'à la paix de Belgrade, 1718–1739* (Paris: Bellizard, 1839) 457.
44. The quote presents the original spelling. See *Le voyage d'outremer de Bertrandon de la Broquière* (Paris: Ernest Leroux, 1892) 89.
45. Starter cultures are microbiological cultures which perform fermentation.
46. Studying the "globalization" of consumption, social scientist Constance Classen argued that, "imported goods, images and terms are often reinvented within the context of their new cultural location to suit local sensibilities." One might argue that as a new commodity, yoghurt required a "reinvention of meaning" in order to be accepted. Quoted in Peter Jackson, "Commodity Cultures: The Traffic in Things," *Transactions of the Institute of British Geographers* 24.1 (1999): 95.
47. Faustine Régnier, "How We Consume New Products: The Example of Exotic Foods (1930–2000)," *Global Issues in Food Science and Technology*, Gustavo V. Barbosa-Cánovas, Alan Mortimer, David Lineback, Walter Spiess, Ken Buckle, and Paul Colonna, eds. (Burlington: Elsevier, 2009) 142.
48. Claude Fischler, *L'omnivore: le goût, la cuisine et le corps* (Paris: Points, 1990) 165.
49. Claude Fischler, "Pensée magique et utopie dans la science," *Cahiers de l'Ocha. Special Issue. Pensée Magique et Alimentation Aujourd'hui* 5 (1996).
50. Régnier, "How We Consume New Products," 142.
51. See Albert Fournier, Adolphe Combe, and William Gaynor States, *Intestinal Auto-Intoxication* (Rebman Co, 1908); La Société de la Maya Bulgare, *Maya Bulgare. Étude sur le yoghourt ou lait caillé bulgare obtenu par la maya ou ferment bulgare* (Paris: La Société de la Maya Bulgare, 1910); Loudon McQueen Douglas, *The Bacillus of Long Life: A Manual of the Preparation and Souring of Milk for Dietary Purposes* (New York: G.P. Putnam's Sons, 1911).
52. Fournier, Combe, and States, 336–37.
53. La Société de la Maya Bulgare, 8–10, 15; Douglas, 1–15.
54. Fournier, Combe, and States, 337–38; Douglas, 1–15, *Maya Bulgare*, La Société de la Maya Bulgare, 4–10.
55. See Douglas; La Société de la Maya Bulgare.
56. See Fournier, Combe, and States, 337.
57. Faustine Régnier, "Comment la cuisine française s'approprie l'étranger: Discours sur l'exotisme dans la presse féminine (1930–2000)," *Gastronomie et identité culturelle française. Discours et représentations (XIXe-XXIe siècles)*, Françoise Hache-Bissette, and Denis Saillard, eds. (Paris: Nouveau Monde Editions, 2005).

58. Régnier, "How We Consume New Products," 142.
59. I borrowed the concept "food neophobia" from Natalie Rigal, referring to children's refusal to consume unfamiliar foods as a preventive reaction in order to avoid possible poisoning or experiencing strange and undesirable tastes. See Natalie Rigal, "Development of Taste," *Objective Nutrition* 64 (2002).
60. See P. Guéguen, "Étude sur le yoghourt (lait caillé bulgare). Son emploi à bord et dans les hôpitaux de la marine," *Archives de Médecine Navale* 92 (1909): 151.
61. Régnier, "Comment la cuisine française s'approprie l'étranger."
62. George Herschell, "The Therapeutical Value of the Lactic-acid Bacillus. A Discussion," *Journal of the Royal Society of Medicine. Therapeutical and Pharmacological Section* 3 (1910): 51–64.
63. Herschell, 51–52.
64. Lisa Heldke, "Let's Cook Thai: Recipes for Colonialism," *Food and Culture: A Reader*, Carole Counihan and Penny Van Esterik, eds. (New York: Routledge, 2008) 330.
65. Heldke, 331.
66. Despite the fact that Nicolae Iorga was Romanian, he was trained and spent most of his life in France. Hence, he was writing for a French audience.
67. Nicolae Iorga, "Les voyageurs orientaux en France." *Revue historique du Sud-est européen*, no. 1–3 (1927): 1–25.
68. Iorga, 5.
69. Iorga, 2.
70. Fournier, Combe, and States, 338.
71. See Adolphe Combe, "Curdled Milk and intestinal Decomposition," *The British Medical Journal* 3378.2 (1925): 47–48.
72. "Larousse Universel En 2 Volumes: Nouveau Dictionnaire Encyclopédique," *Larousse*, Claude Augé, ed. (Paris: Larousse, 1923) 1272.
73. Fernand Corminboeuf, *Recherches biochimiques sur le yoghourt et le lait acidophile* (Institute Agricole d' Oika, 1933) 3.
74. For more on this topic, see Maria Todorova, *Imagining the Balkans* (New York: Oxford University Press, 2007).
75. "Oldest Woman in the World. Bulgarian Peasant Said to Have Been Born in 1784," *New York Daily Tribune* (1910): 4.
76. See "Oldest Woman in the World," 4. The same information appeared in "For Honor of Being Oldest Woman in the World," *Hopkinsville Kentuckian* (1910): 1; Maximilien Albert and Henri André Legrand, *La longévité à travers les âges*. (Paris: Ernest Flammarion, 1911) 13–14. The authors did not provide her surname. "Baba" in Bulgarian means old woman or grandmother. Hence, Vasilka was her given name.
77. Douglas, i.
78. Douglas, i.
79. Douglas, 12.
80. Douglas, 12.
81. Leo F. Rettger and Harry A. Cheplin, *A Treatise on the Transformation of the Intestinal Flora with Special Reference to the Implantation of Bacillus Acidophilus* (London: Oxford University Press, 1921) 5.
82. See the book discussing yoghurt's origins and consumption patterns published by the company La Société de la Maya Bulgare.
83. See Elitsa Stoilova, *Producing Bulgarian Yoghurt: Manufacturing and Exporting Authenticity* (Amsterdam: Amsterdam University Press, 2013) 67–73; Yavuz Köse, "Nestlé in the Ottoman Empire: Global Marketing with Local Flavor 1870–1927," *Enterprise and Society* 9.4 (2008): 724–61.
84. Here I am following Barbara Orland's argumentations. Orland, 229–232.