

# Understanding the Neolithization Processes in the Mediterranean based on Food Traditions

Julien Vieugué

French National Centre for Scientific Research (CNRS),  
UMIFRE 7 French Research Centre in Jerusalem  
(CRFJ)

Niccolò Mazzucco

University of Pisa, Department of Civilizations and  
Forms of Knowledge

## Abstract

The diversity of food practices among the first Mediterranean farmers is expressed not only in the range of food resources exploited, which includes a wide range of domesticated and wild animals and plants from the marine and terrestrial worlds. It can also be observed in the ways of producing, procuring, storing, preparing and consuming foodstuffs, which are made according to a wide range of gestures. Far from being static and homogeneous, the food practices of the first Mediterranean farmers underwent clear chronological evolutions that could be relatively rapid (over a few centuries) or gradual (over one or even two millennia). They are also subject to discernible geographical variations on macro- and micro-regional scales. Such spatio-temporal variations in the diet of the first Mediterranean farmers seem to be explained by both environmental (such as climate, flora and fauna, soils) and socio-cultural factors (such as the age and sex of the individuals).

## Keywords

Food; Diet; Last Hunter-gatherers; First farmers; Mediterranean; Southwest Asia; Epipalaeolithic; Pre-Pottery Neolithic; Early Neolithic

## Résumé

La diversité des pratiques alimentaires chez les premiers paysans de Méditerranée s'exprime non seulement dans le spectre des ressources vivrières exploitées qui comprend un large panel d'espèces animales et végétales, domestiques et sauvages, issues des mondes marins et terrestres. Elle s'observe tout aussi dans les modes de production, d'acquisition, de conservation, de préparation et de consommation des denrées qui s'opèrent suivant un large éventail de gestes. Loin d'être statique et homogène, les pratiques alimentaires des premiers paysans de Méditerranée connaissent des évolutions chronologiques claires qui peuvent être relativement brutales (sur quelques siècles) ou graduelles (sur un voire deux millénaires). Elles connaissent aussi des variations géographiques discernables aux échelles macro- et micro-régionales. De telles variations spatio-temporelles constatées dans l'alimentation des premiers paysans de Méditerranée semblent à la fois s'expliquer par des facteurs environnementaux (tels que le climat, la faune et la flore, les sols) et socio-culturels (tels que l'appartenance des individus à une classe d'âge et de sexe).

## Mots-clés

Alimentation; derniers chasseurs-cueilleurs; premiers agro-pasteurs; Méditerranée ; Asie du Sud-ouest ; Epi-Paléolithique ; Néolithique pré-céramique ; Néolithique ancien

# Statement regarding the diversity of food practices among the first Mediterranean farmers

The diet of the first Mediterranean farmers shows striking similarities from the Near East to the Spanish Levant. Once the major shift towards a fully developed Neolithic socioeconomic system occurred at the turn of the seventh and sixth millennia cal. BC, we observe the widespread adoption of a food model henceforth based on (i) the predominant exploitation of terrestrial resources;<sup>1</sup> (ii) the preferred consumption of domesticated plants (cereals and legumes)<sup>2</sup> and animals (goats, cattle, swine);<sup>3</sup> (iii) the regular use of pottery for the preparation of foodstuffs.<sup>4</sup> Such similarities, observed across the Mediterranean, are certainly linked to the fact that the first Neolithic communities of the region were highly interconnected, as shown by the long-distance exchange of obsidians.<sup>5</sup> Beyond this apparent homogeneity lies a huge diversity of food practices. This diversity is reflected in (i) the diet of the first Mediterranean farming societies, which is much more fluctuating than we thought until very recently. As suggest by anthropological<sup>6</sup> and isotopic<sup>7</sup> analyses of human remains from several early Neolithic sites in the Mediterranean, this diet appears to be more or less rich in animal or plant proteins. The multiplicity of food choices can also be observed in (ii) the range of animal and plant resources exploited, which is much wider than those made up of the bred animals (such as goats, sheep, cattle and pigs) and cultivated plants (such as wheat, barley, lentils and peas). As bio-archaeological studies of faunal and botanical remains show, the first farmers of the region collected and consumed many other species, including wild terrestrial and marine animals (such as gazelle, wild boar, rabbit, deer, oysters, mussels and sea bream),<sup>8</sup> as well as diverse wild plants, fruits and seeds (such as pistachios, almonds, acorns, hazelnuts, figs, apples, pears and strawberries).<sup>9</sup> The diversity of food habits is also reflected in (iii) the ways of collecting, storing, preparing and consuming foodstuffs, which appear to be as varied as the raw food resources exploited. As the use-wear analyses of stone tools from several Early Neolithic sites in the Mediterranean show, the first farmers of the region harvested cereals with different shaped sickles that they used with different gestures,<sup>10</sup> before crushing them using grinding stones that were moved in a back-and-forth or circular motion.<sup>11</sup> Such a diversity of foodstuffs and food practices, observed across the entire Mediterranean, seems to be partly explained by the constant reshaping of the first agro-pastoral communities which interacted with the last Mediterranean hunter-gatherers.<sup>12</sup>

Far from being static and homogeneous, the food habits of the first farming societies in the Mediterranean changed during the establishment of the Neolithic way of life in the East

---

1 Gwenaëlle GOUDE, Domingo Carlos SALAZAR- GARCÍA, Robert C. POWER et al., “New insights on Neolithic food and mobility patterns in Mediterranean coastal populations”, *American Journal of Physical Anthropology*, vol. 173, no. 2 (2020), pp. 218-35.

2 Georges WILLCOX, “Food in the Early Neolithic of the Near East”, in Lucio MILANO (ed.), *Paleonutrition and food practices in the ancient Near East. History of the Ancient Near East: towards a multidisciplinary approach* (Padova, 2014), pp. 1-10.

3 Jean-Denis VIGNE, “Zooarchaeological aspects of the Neolithic diet transition in the Near East and Europe and their putative relationships with the Neolithic Demographic Transition”, in Jean-Pierre BOCQUET-APPEL, Ofer BAR-YOSEF (eds), *The Neolithic Demographic Transition and its Consequences* (Dordrecht, 2018), pp. 179-205.

4 Julien VIEUGUÉ, Yosef GARFINKEL, Omry BARZILAI et al., “Pottery function and culinary practices of Yarmukian societies in the late seventh millennium cal. BC: First results”, *Paléorient*, vol. 42, no. 2 (2016), pp. 97-115.

5 Juan José IBÁÑEZ, David ORTEGA, Daniel CAMPOS et al., “Testing complex networks of interaction at the onset of the Near Eastern Neolithic using modelling of obsidian exchange”, *Journal of the Royal Society Interface*, vol. 12, no. 107 (2015), article 20150210, <https://doi.org/10.1098/rsif.2015.0210>; Andrea PESSINA, Giovanna RADI, “La diffusione dell’ossidiana nell’Italia centro- settentrionale”, in *Atti della XXXIX Riunione*

(10<sup>th</sup>–7<sup>th</sup> millennia cal. BC) and its spread to the West (7<sup>th</sup>–6<sup>th</sup> millennia cal. BC). Complex chronological evolutions are discernible at different time scales. Certain changes observed in the dietary practices of these communities thus seem to have occurred gradually over one or two millennia. Archaeobotanical studies show as an example a linear increase in the consumption of wild barley from the Epipalaeolithic (11<sup>th</sup> millennium cal. BC) to the beginning of the Pre-Pottery Neolithic B (PPNB) (9<sup>th</sup> millennium cal. BC).<sup>13</sup> The study of knapped lithic industries, supported by the analysis of carious lesions in individuals buried during the Natufian and Pre-Pottery Neolithic (PPN), also attests to the gradual shift from gathering to cultivating wild and domestic cereals during the Epipalaeolithic–Neolithic transition (11<sup>th</sup>–8<sup>th</sup> millennia

---

*scientifica: materie prime e scambi nella preistoria italiana: nel cinquantenario della fondazione dell'Istituto italiano di preistoria e protostoria: Firenze, 25-27 novembre 2004* (Firenze, 2006), pp. 435-60.

6 Fanny BOCQUENTIN, Bérénice CHAMEL, Marie ANTON et al., “The Subsistence and Foodways Transition during the Neolithization Process: Glimpses from a Contextualized Dental Perspective”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

7 Gwenaëlle GOUDE, Domingo Carlos SALAZAR- GARCÍA, Robert C. POWER et al., “New insights on Neolithic food ...”; Domingo Carlos SALAZAR-GARCÍA, María FONTANALS-COLL, Gwenaëlle GOUDE et al., “To ‘seafood’ or not to ‘seafood’? An isotopic perspective on dietary preferences at the Mesolithic-Neolithic transition in the Western Mediterranean”, *Quaternary International*, vol. 470 (2018), pp. 497-510.

8 Maria SAÑA, Vanessa NAVARRETE, Eloísa FERRATGES et al., “Animal Resources, Foodways and Cooking Practices during the Neolithic in the Western Mediterranean: An Integrated Archaeozoological Approach”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX; Lionel GOURICHON, Liora HORWITZ, “An Inter-Regional Comparison of Animal Domestication in the Northern and Southern Levant”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

9 Michael WALLACE, Glynis JONES, Miochael CHARLES et al., “Re-analysis of archaeobotanical remains from pre- and early agricultural sites provide no evidence for a narrowing of the wild plant spectrum during the origins of agriculture in Southwest Asia”, *Vegetation History and Archaeobotany*, vol. 28, no. 4 (2019), pp. 449-63; Amaia ARRANZ-OTAEGUI, “Archaeology of Plant Foods. Methods and Challenges in the Identification of Plant Consumption during the Pre-Pottery Neolithic in Southwest Asia”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX; Laure BOUBY, Philippe MARINVAL, Frédérique DURAND et al., “Early Neolithic (ca. 5850-4500 cal BC) agricultural diffusion in the Western Mediterranean: An update of archaeobotanical data in SW France”, *Plos One*, vol. 15, no. 4 (2020), article e0230731, <https://doi.org/10.1371/journal.pone.0230731>; Ferran ANTOLÍN, Laurent BOUBY, Lucie MARTIN et al., “Archaeobotanical Evidence of Plant Food Consumption among Early Farmers (5700-4500 BC) in the Western Mediterranean Region”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

10 Niccolò MAZZUCCO, Giacomo CAPUZZO, Cristiana PETRINELLI et al., “Harvesting tools and the spread of the Neolithic into the Central-Western Mediterranean area”, *Quaternary international*, vol. 470 (2018), pp. 511-28; Niccolò MAZZUCCO, “Stones That Made Food: A Lithic Viewpoint on Food Production Practices in the Early Mediterranean Neolithic”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX; Patricia C. ANDERSON, “History of Harvesting and Threshing techniques for Cereals in the Prehistoric Near East”, in Ardeshir B. DAMANIA, J. VALKOUN, Georges WILLCOX et al. (eds), *The Origins of Agriculture and Crop Domestication* (Aleppo, 1998), pp. 145-59; Fiona PICHON, Juan José IBÁÑEZ, “Knapped Tools for Obtaining Food Resources in the Origins of Farming in the Near East”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

11 Laure DUBREUIL, Nigel GORING-MORRIS, “Exploring Food Practices among the First Agro-Pastoral Communities of the Southern Levant. The Ground Stone Tool Perspective”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX; Caroline HAMON, “A Revolution in Food Preparation? Grinding and Pounding Plants in the First Farming Communities of Western Europe and the Mediterranean Region”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

12 Thomas PERRIN, Claire MANEN, “Potential interactions between Mesolithic hunter-gatherers and Neolithic farmers in the Western Mediterranean: The geochronological data revisited”, *Plos One*, vol. 16, no. 3 (2021), article e0246964, <https://doi.org/10.1371/journal.pone.0246964>; Maité RIVOLLAT, Choongwon JEONG, Stephan SCHIFFELS et al. “Ancient Genome-wide DNA from France highlights the complexity of interactions between Mesolithic hunters-gatherers and Neolithic farmers”, *Science Advances*, vol. 6, no. 22 (2020), article eaaz5344, <https://advances.sciencemag.org/content/6/22/eaaz5344>.

13 Amaia ARRANZ-OTAEGUI, “Archaeology of Plant Foods ...”.

cal. BC).<sup>14</sup> Other changes observed in the food practices of the first Mediterranean farmers seem, on the contrary, to have occurred very quickly, over a few centuries at most. Archaeozoological studies thus reveal the sudden reduction in the consumption of gazelle in the Middle PPNB (last quarter of the 9<sup>th</sup> millennium cal. BC).<sup>15</sup> Pottery studies show, furthermore, the almost instantaneous emergence of food storage in large ceramic vessels during the Early Neolithic in West Anatolia and Bulgaria (first quarter of the 6<sup>th</sup> millennium cal. BC).<sup>16</sup>

Strong regional variations in the choice of raw food resources exploited as well as in the ways of collecting, storing and preparing foodstuffs are discernible at different spatial scales. Certain differences can thus be observed at the micro-regional level, even though it is often occupied by the same chrono-cultural entity. Archaeozoological studies of the faunal remains coming from Early Neolithic sites in the Iberian Peninsula show, for example, the preferred hunting of deer and wild boar in the north, rabbits in the centre and wild goats in the south of the region.<sup>17</sup> Use-wear analyses of grinding tools from several PPNB sites in the Southern Levant reveal the processing of cereals in different ways, probably indicating the preparation of various recipes.<sup>18</sup> Other differences can only be observed at the macro-regional level, which often includes a patchwork of chrono-cultural entities. Archaeozoological studies thus show a more important consumption of hunted species and bovines in the central Mediterranean than in the eastern and western Mediterranean.<sup>19</sup> Use-wear studies of the flint industries reveal, furthermore, the use of curved sickles whose inserts are arranged to form a serrated edge in the central Mediterranean, while ‘L’-shaped harvesting knives with a straight cutting edge are used in the western Mediterranean.<sup>20</sup>

The chronological and regional variations observed in the diet of the first Mediterranean farming societies seem to be partly explained by environmental factors. Climate, flora, fauna and soils are among the key components that can influence not only the choice of raw food resources exploited, but also the ways of collecting, storing and preparing foodstuffs. The availability of wild animals (fish and molluscs) and plants (herbaceous, etc.) that are likely to be consumed obviously depends on the environment in which the populations lived (coastline vs land, mountains vs plains, humid vs arid zones, forested or open landscapes).<sup>21</sup> The

---

14 Juan José IBÁÑEZ, Patricia C. ANDERSON, Jesús GONZÁLEZ-URQUIJO et al., “Cereal cultivation and domestication as shown by microtexture analysis of sickle gloss through confocal microscopy”, *Journal of Archaeological Science*, vol. 73 (2016), pp. 62-81; Fanny BOCQUENTIN, Bérénice CHAMEL, Marie ANTON et al., “The Subsistence and Foodways Transition ...”.

15 Lionel GOURICHON, Liora HORWITZ, “An Inter-Regional Comparison ...”.

16 Elisha VAN DEN BOS, “House and Hearth: The Social Setting of Food Preparation in the Western Anatolian and Southeastern European Neolithic”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX; Julien VIEUGUÉ, *Fonction des contenants et des outils en céramique : les premières productions de Bulgarie (6<sup>e</sup> millénaire av. J.C.)* (Paris, 2014).

17 Maria SAÑA, Vanessa NAVARRETE, Eloísa FERRATGES et al., “Animal Resources ...”.

18 Laure DUBREUIL, Nigel GORING-MORRIS, “Exploring Food Practices ...”.

19 Jean-Denis VIGNE, “Exploitation des animaux et néolithisation en Méditerranée nord-occidentale”, in Jean GUILAINE, Claire MANEN, Jean-Denis VIGNE (eds), *Pont de Roque-Haute (Portiragnes, Hérault). Nouveaux regards sur la néolithisation de la France méditerranéenne* (Toulouse, 2007), pp. 221-31; Anne TRESSET, Jean-Denis VIGNE, “La chasse, principal élément structurant la diversité des faunes archéologiques du Néolithique ancien, en Europe tempérée et en Méditerranée: tentative d’interprétation fonctionnelle”, in Rose-Marie ARBOGAST, Christian JEUNESSE, Jörg SCHIBLER (eds), *Premières rencontres danubiennes, Actes de la première table-ronde : Rôle et statut de la chasse dans le Néolithique ancien danubien (5500-4900 av. J.-C.)* (Rahden, 2004), pp. 129-51.

20 Niccolò MAZZUCCO, Juan José IBÁÑEZ, Giacomo CAPUZZO et al., “Migration, adaptation, innovation: the spread of the Neolithic harvesting technologies in the Mediterranean”, *Plos One*, vol. 15, no. 7 (2020), article e025874, <https://doi.org/10.1371/journal.pone.0232455>.

21 Lionel GOURICHON, Liora HORWITZ, “An Inter-Regional Comparison ...”.

adaptation of domesticated animals (caprine and bovine) and plants (cereals and legumes) to the newly Neolithic territories of the central and western Mediterranean (more or less temperate climate, more or less fertile soils, etc.) probably required various breeding and cultivation strategies.<sup>22</sup> However, environmental factors alone cannot explain such a diversity of culinary practices during the Early Neolithic in the Mediterranean. Human factors undoubtedly played a crucial role in the constitution of this patchwork of dietary behaviours. The affiliation of human groups to a cultural entity undoubtedly shaped their eating habits, as revealed for example by the marked differences in diet between the Sesklo and Impressa cultures.<sup>23</sup> The membership of an individual to a given social class also influenced food habits,<sup>24</sup> as evidenced by the practice of gendered diets according to age and/or sex among the Natufian and PPN cultures.<sup>25</sup> This variability, resulting from human choices made in accordance with their environments, their social and cultural affiliations, opens up very promising perspectives for understanding the Neolithization processes in the Mediterranean based on food traditions.

## Future directions of research

Despite our increasing knowledge of the diet of the first Mediterranean farmers over the last twenty years, it has to be said that we still have a very fragmentary view of the culinary habits of these communities. The various archaeological artefacts found at the Early Neolithic sites in Mediterranean are, first, still poorly studied from the perspective of reconstructing the ancient food practices. This is particularly true for kitchen utensils (ceramic and stone vessels, bone spoons, flint knives and scrapers, grinding stones and mortars, etc.), which have still rarely been the subject of a thorough functional study for understanding the substances processed and the associated gestures.<sup>26</sup> The same is true for storage (silos, granaries) and cooking features (ovens, hearths), which have rarely been analysed using a detailed micro-morphological approach in order to determine their mode of operation.<sup>27</sup> Beyond the study of food remains (faunal and botanical), should we not also consider humans (human remains), the structures (ovens and

---

22 Maria IVANOVA, Bea DE CUPERE, Jonathan ETHIER et al. “Pioneer farming in southeast Europe during the early sixth millennium BC: Climate-related adaptations in the exploitation of plants and animals”, *Plos One*, vol. 13, no. 5 (2018), article e0197225, <https://doi.org/10.1371/journal.pone.0197225>; Aurélie DE VAREILLES, Laurence BOUBY et al., “One sea but many routes to Sail. The early maritime dispersal of Neolithic crops from the Aegean to the western Mediterranean”, *Journal of Archaeological Science: Reports*, vol. 29 (2020), article 102140, <https://doi.org/10.1016/j.jasrep.2019.102140>; Maria SAÑA, Vanessa NAVARRETE, Eloísa FERRATGES et al., “Animal Resources ...”; Ferran ANTOLÍN, Laurent BOUBY, Lucie MARTIN et al., “Archaeobotanical Evidence ...”.

23 Anne TRESSET, Jean-Denis VIGNE, “La chasse, principal élément ...”. Niccolò MAZZUCCO, Giacomo CAPUZZO, Cristiana PETRINELLI et al., “Harvesting tools and the spread ...”; Niccolò MAZZUCCO, Bernard GASSIN, Juan Francisco GIBAJA et al., “Microliths use in Western Mediterranean”, *Rubricatum*, vol. 5 (2012), pp. 129-36; Javier FERNÁNDEZ LÓPEZ DE PABLO, “Las flechas en el Arte Levantino: aportaciones desde el análisis de los proyectiles del registro arqueológico del Riu de les Coves (Alt Maestrat, Castelló)”, *Archivo de Prehistoria Levantina*, vol. 26 (2006), pp. 101-59.

24 Gwenaëlle GOUDE, Domingo Carlos SALAZAR- GARCÍA, Robert C. POWER et al., “New insights on Neolithic food ...”; Niccolò MAZZUCCO, “Stones That Made Food ...”.

25 Fanny BOCQUENTIN, Bérénice CHAMEL, Marie ANTON et al., “The Subsistence and Foodways Transition ...”.

26 See particularly Laure DUBREUIL, Nigel GORING-MORRIS, “Exploring Food Practices ...”; Caroline HAMON, “A Revolution in Food Preparation ...”.

27 See particularly Elisha VAN DEN BOS, “House and Hearth ...”; Cecilia CONATI BARBARO, “The Social Function of Cooking Structures during the Neolithic. A View from the Central Mediterranean”, *Food & History*, vol. 19, no. 1-2 (2021), pp. XXX.

hearths, silos and granaries) and the tools (ceramic and stone containers, flint tools, etc.) that were used to produce, collect, store, prepare and consume foodstuffs in order to have a more comprehensive vision of past food practices?

Research on the various kinds of archaeological evidence of the diet of the first Mediterranean farming communities has, then, remained very focused on the identification of domesticated terrestrial resources (caprine-bovine-pigs vs cereals-legumes) and associated secondary products (in particular dairy products and beer). This assertion is not only true for archaeozoological and archaeobotanical studies, which have been heavily occupied by key scientific issues related to the domestication of plants and animals during this pivotal period in human history.<sup>28</sup> It is also the case for the chemical analyses of lipid residues trapped in the porous walls of the earliest Mediterranean ceramic vessels, which have largely focused on the question of dairy products.<sup>29</sup> In addition to the food resources derived from agriculture and animal husbandry, should we not pay more attention to the products sourced from hunting, fishing and gathering? Beyond the range of ingredients consumed, should we not try to reconstruct the ways in which Neolithic people collected, stored, prepared and consumed foodstuffs?

Few studies have, lastly, taken into account and cross-referenced the various archaeological remains that are likely to throw light on the diet of the first Mediterranean farmers, although their complementarities have been emphasized many times. Data from previous studies conducted separately have at best been gathered. The results from archaeozoology (in particular the slaughter profile of goats-sheep and cattle) and organic chemistry (molecular and isotopic composition of pottery residues) have, for example, been compared in order to specify the place of dairy products among the main Early Neolithic cultural entities in the Mediterranean.<sup>30</sup> Data from archaeobotany (in particular the range of cereals and legumes exploited) and use-wear analysis of stone tools (distribution of polishes on sickle blades) have also been combined in order to better define the techniques of cereal harvesting and grinding among these communities.<sup>31</sup> Beyond these cumulative approaches, should we not carry out an accurate multidisciplinary analysis that combines all the proxies in order to reconstruct the prehistoric food systems in all their diversity and complexity? Is it possible to go beyond a qualitative comparison of data to suggest a robust modelling of the Neolithic food system by integrating different sources of information?

---

28Jean-Denis VIGNE, “The origins of animal domestication and husbandry: A major change in the history of humanity and the biosphere”, *Comptes rendus Biologies*, vol. 334, no. 3 (2011), pp. 171-81; Jean-Denis VIGNE, Daniel HELMER, “Was milk a ‘secondary product’ in the Old World Neolithisation process? Its role in the domestication of cattle, sheep and goats”, *Anthropozoologica*, vol. 42, no. 2 (2007), pp. 9-40; Melinda A. ZEDER, “Domestication and early agriculture in the Mediterranean Basin: Origins, diffusion, and impact”, *Proceedings of the National Academy of Sciences*, vol. 105, no. 33. (2008) pp. 11597-604.

29Richard EVERSLED, Sebastian PAYNE, Andrew G. SHERRATT et al., “Earliest date for milk use in the Near East and southeastern Europe linked to cattle herding”, *Nature*, vol. 455 (2008), pp. 528-31; Cynthianne DEBONO SPITERI, Rosalinde E. GILLIS, Mélanie ROFFET-SALQUE et al., “Regional asynchronicity in dairy production and processing in early farming communities of the northern Mediterranean”, *Proceedings of the National Academy of Sciences*, vol. 113, no. 48 (2016), pp. 13594-99; Léa DRIEU, Alexander LUCQUIN, Laura CASSARD et al., “A Neolithic without dairy? Chemical evidence from the content of ceramics from the Pendimoun rock-shelter (Castellar, France, 5750-5150 BCE)”, *Journal of Archaeological Science: Reports*, vol. 35 (2021), article 102682, <https://doi.org/10.1016/j.jasrep.2020.102682>.

30 Cynthianne DEBONO SPITERI, Rosalinde E. GILLIS, Mélanie ROFFET-SALQUE et al., “Regional asynchronicity ...”.

31 Bernard GASSIN, Nuno FERREIRA BICHO, Laurent BOUBY et al., “Variabilité des techniques de récolte et traitement des céréales dans l’Occident méditerranéen au Néolithique ancien et moyen : facteurs environnementaux, économiques et sociaux”, in Alain BEECHING, Éric THIRAUT, Joël VITAL (eds), *Économie et société à la fin de la préhistoire. Actes des 7e Rencontres méridionales de Préhistoire récente, Bron, 3-4 novembre 2006* (Lyon, 2010), pp. 19-37.

Such an interdisciplinary analysis would make it possible to accurately reconstruct food systems, from the production of food resources to the consumption of meals, via the stages of food procurement, storage and preparation. This holistic approach makes it possible to establish the food traditions that betray the sociocultural identity of the individuals and societies who pass them on from generation to generation. By studying their distribution in space and time, it would be possible to shed new light on the filiations and interactions between communities, and to trace the mobility of individuals and groups who brought plants and animals with them using maritime or land pathways. Such an approach to the Neolithization processes, based on the contextualized study of food traditions in Mediterranean, would undoubtedly enrich our current knowledge of the historical phenomena, which have so far been approached mainly through the stylistic and technological analysis of material culture.



