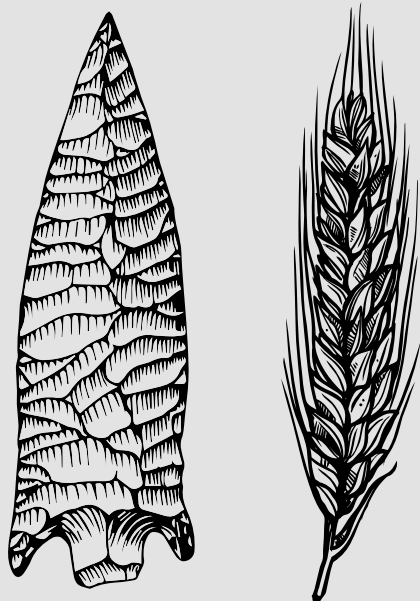


# Revolutions

THE NEOLITHISATION OF THE MEDITERRANEAN  
BASIN: THE TRANSITION TO FOOD-PRODUCING  
ECONOMIES IN NORTH AFRICA, SOUTHERN  
EUROPE, AND THE LEVANT

Joanne M. Rowland  
Giulio Lucarini  
(eds.)  
Geoffrey J. Tassie



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THE NEOLITHISATION OF THE MEDITERRANEAN BASIN involved a change from a procurement to a productive economy. Although the domestication of most of the plants and animals associated with the Old World Neolithic occurred in the Levantine Fertile Crescent, the Second Neolithic Revolution that resulted in elements of the Neolithic such as domesticates and objects occurring in North Africa and throughout Europe, is arguably just as important a process. Archaeological attention has been focused primarily on the initial domestication process, and only latterly on the spread of food producing economies.

In recent years, research into the Neolithisation of both Europe and North Africa has been increasing, notably so into the process by which varied communities adopted new food producing strategies. The implementation of new technology, methods, and theories have contributed to refinements in the timing of change in economies, analysis of the types of food eaten, and the reasons behind these transformations.





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Geoffrey John Tassie 'Tass' † (17th April 1959 – 28th March 2019)

Geoffrey John Tassie ('Tass') was at the heart of the Revolutions' workshop as a postdoctoral fellow at Topoi. His fieldwork in Egypt remained tightly aligned with the transitions to the first settled communities and transitions to statehood. He worked in the Fayum, at Neolithic Sais, Merimde Beni Salama, and Kafr Hassan Dawood, and played a key part in a prehistoric heritage planning project at St Katherine's Protectorate, in the Sinai. Tass co-founded the Egyptian Cultural Heritage Organisation (ECHO) in the late 1990s and remained its driving force until his passing, co-editing *Managing Egypt's Heritage* and *The Management of Egypt's Heritage*. His determination and dedication led to the publication of *Prehistoric Egypt* and *Standards of Archaeological Excavation* and in 2018 Tass instigated the *Naqada Regional Archaeological Survey* and *Site Management Project*. Loved by his friends and colleagues of all countries, he made a huge impression on his new colleagues at the Grand Egyptian Museum, where he had worked since September 2018. A gentle man, Tass always had time to discuss research and offer advice and encouragement to colleagues and students. Tass worked tirelessly on the editing of this volume, and we all dedicate this book to his memory.



Joanne M. Rowland, Geoffrey J. Tassie (†), Giulio Lucarini

## Revolutions. An Introduction

### Summary

This volume is the result of the two-day workshop organized in Berlin on the Neolithisation of the Mediterranean Basin. The implementation of new technology, methods, and theories have contributed to refinements in the timing of the changes in economies, analysis of the types of resources exploited, and the reasons behind these transformations. The papers herein seek to link theories and models with evidence from case studies around the Mediterranean Basin and along the Nile valley. The approaches of the authors range from scientific analyses, to theoretical approaches and artefact-based analysis. We hope to contribute to the debate about the various processes involved in the Neolithisation of the regions around the Mediterranean Sea.

Keywords: Neolithisation; Neolithic; climate change; environment; domesticates; food production; Mediterranean

Dieser Band ist das Ergebnis des zweitägigen Workshops über die Neolithisierung des Mittelmeerbeckens, der in Berlin orga-

nisiert wurde. Die Implementierung neuer Technologien, Methoden und Theorien trug bei zur Verbesserung zeitlicher Abläufe in der Bewirtschaftung, der Analyse der Art der Lebens- und Futtermittel und den Gründen hinter diesen Transformationen. Die Beiträge wollen Theorien und Modelle mit Evidenz aus Fallstudien im Mittelmeerraum verbinden. Die Ansätze der Autorinnen und Autoren reichen von wissenschaftlichen und Artefakt-basierten Analysen bis zu theoretischen Annäherungen. Wir hoffen damit zur Debatte über verschiedene Prozesse der Neolithisierung in Ländern am Mittelmeer beizutragen.

Keywords: Neolithisierung; Neolithikum; Klimawandel; Umwelt; Nutztiere; Nahrungsmittelproduktion; Mittelmeer

The editors would like to extend special thanks to Mary Beth Wilson who went to great lengths to bring this volume to completion, and in the final proof stages to Joselin Düsenberg. We appreciate it very much.

Most studies on the processes of Neolithisation have focused on the mode of introduction or acquisition of the so-called ‘Neolithic package’ (i.e. pottery, polished stone tools, cultigens, and domestic animals). Recent research, however, is showing that separate elements of this ‘package’ appeared at different times around the Mediterranean Basin, and experienced variable longevity after its uptake and variability in terms of what was taken up. When Vere Gordon Childe coined the term Neolithic Revolution in the 1920s, he did not have the benefit of the radiometric dating methods we have today.<sup>1</sup> With the benefit of absolute chronologies of increasing precision, the timing of Neolithisation on intra- and inter-regional scales is now attainable. The chronology and pathways in which domesticated plants and animals, and other Neolithic practices, spread throughout Europe and North Africa from the core area of the Levant were the main focus of the workshop “*Revolutions. The Neolithisation of the Mediterranean Basin: The Transition to food Producing Economies in North Africa, Southern Europe and the Levant*”. The revolutionary character of this process was questioned throughout the discussions and more nuanced reconstructions of the reality that has been witnessed in several areas around the Mediterranean.

Research on the process of Neolithisation has generally concentrated on ‘traditional’ sources of archaeological data (e.g. archaeobotany and archaeozoology), with recent contributions from archaeogenetic analyses aimed at establishing whether animals were domesticated locally or not<sup>2</sup> and examining the evolutionary dynamics of plant domestication. Archaeogenetics is also being used to trace human movements across continents.<sup>3</sup> Traditional methods of analysis have now been joined by recent innovative scientific methods: organic residue analysis and stable isotope analysis, as well as Accelerator Mass Spectrometry (AMS) radiocarbon dating.<sup>4</sup> One of these methods, organic residue analysis, can tell us much about ancient diet, through the lipids that come from the fats, oils, and waxes of the substances originally held in the vessels. In recent years, researchers

have been able to identify the processing of ruminant and non-ruminant carcass and ruminant milk products, aquatic products, plants, beeswax, and tree resins in ceramic vessels across a wide range of geographical and chronological contexts<sup>5</sup>. The potential for radiocarbon dating these lipids<sup>6</sup> opens up new possibilities for direct dating of species, and for charting the changing use and decline of species within food production through the Neolithic. Another key method, stable isotope analysis (carbon, oxygen, nitrogen, and strontium), has revolutionized how archaeologists reconstruct diet, how they examine the movement of populations of humans and animals,<sup>7</sup> and how they understand cultural interaction.

On Thursday the 29th of October 2015, the Revolutions Workshop was opened by the Speaker of Topoi for the Freie Universität Berlin, Michael Meyer.<sup>8</sup> Following his introduction, the first of the three keynote speakers was introduced, Barbara E. Barich, who stimulated us with her lecture, “*Rethinking the North African Neolithic: The Multifaceted Aspects of a Long-Lasting Revolution*” (see B. E. Barich in this volume). The applicability of the term Neolithic to the various modes of food production in Africa has been questioned, but as of yet no better term has been proffered. Barich looked at the long developmental period that led to this drastic economic change, examining the climatic changes and the human adaptations, using various datasets emerging from new research in North Africa to examine how and why this change occurred. Barich furthermore discussed the social dimensions that led to the acceptance of new domesticates, the new environment into which they were introduced, and how ways of life changed.

On Friday 30th October, the morning session opened with the second keynote lecture, delivered by Graeme Barker.<sup>9</sup> This keynote addressed the highly relevant theme of “*Where Has 50 years of Research on the Mediterranean Neolithic Got Us To?*” In 1965, Grahame Clark published two classic papers in *Antiquity* and the *Proceedings of the Prehistoric Society* in which he argued that the initial suite of <sup>14</sup>C dates from Early Neolithic sites in Europe suggested a spread of farming from the Near

1 Childe 1936.

2 Decker et al. 2014.

3 D’Atanasio et al. 2018; Fregel et al. 2018.

4 Zakrzewski, Shortland, and Rowland 2015.

5 Dunne, Evershed, et al. 2012; Dunne, Mercuri, et al. 2016; Roffet-

Salque et al. 2016.

6 Casanova et al. 2020.

7 Leppard 2014.

8 Not published in this volume.

9 Not published in this volume.

East into Europe in two major streams between around 8000 BP and 5000 cal BP.<sup>10</sup> Barker examined the extent of our knowledge and understanding today on this topic, decades after the publication of these seminal papers, and the extent to which progress has been made and how the research agenda could develop.

The last of the keynote lectures, by Fekri A. Hassan, closed the Friday sessions, “*Ingenuity, Contingency and Exigency: A New Model of the Origins and Spread of Food Production in Southwest Asia and North Africa*” (see F. A. Hassan in this volume). Peoples’ responses to the environmental changes that occurred as the world started to warm up after the Last Glacial Maximum have been of great interest for many years. The degree to which these changes affected people over the superregional level, particularly those that occurred in North Africa and the Levant, and the interconnectedness of the wider region, were central to this lecture. It also examined how mobility and demographic flexibility combined with reliance, as a matter of insurance, on low risk, labor-intensive foodstuffs were originally pursued, finally, hypothesizing how food production was originally practiced in the Levant ca. 10 000 years ago and how domesticates spread into Africa.

Session One of the workshop on Friday 30th October, “Ecology, Plants, and Animals”, was chaired by Eva Rosenstock and comprised four papers, opened by Veerle Linseele, who addressed the appearance of early livestock within the parameters of archaeozoological research in northeastern Africa (see V. Linseele in this volume). There has been much new faunal evidence for early livestock discovered within the borders of modern Egypt, and Linseele discussed its implications for the timing and routes of dispersal of domesticates. This contribution raised one of the most debated topics, the autonomous domestication of cattle in Egypt, suggesting that the evidence now seems to favor the introduction of domesticated cattle from the Levant mixing with the wild cattle in Egypt, creating African taurine.

Elena Marinova then examined the use of wild plant resources in the early Neolithic as an indication for continuity between the Mesolithic and Neolithic plant-based subsistence economies in southeastern Europe<sup>11</sup> and northeastern Africa.<sup>12</sup> She considered evi-

dence from the Bukova Pusta, Middle Danubian Plain, Romania, and Tell el-Iswid in the Eastern Nile Delta, Egypt. The results suggest that there was a persistence of Mesolithic/Epipalaeolithic traditions, but also that their geographic positions allow for researchers to trace the cultural interactions with the Near East; use of wild fruits or starch rich tubers, rhizomes, etc. are visible in both areas.

Giulio Lucarini and Anita Radini examined the importance of wild plants in the economy of North African prehistoric groups (see G. Lucarini and A. Radini in this volume). A relatively new approach that combines use-wear analysis of grinding tools and plant micro-residue analysis is helping to elucidate the diet of Early and Mid-Holocene communities. In particular, Lucarini and Radini used starch analysis on the grinding stones from Haua Fteah and Farafrā to help clarify their function and determine the types of plants processed by the Holocene communities. This type of analysis shows that a variety of wild grasses were gathered and processed for food in different North African contexts during the Mid-Holocene, and that wild plants represented a primary source of food<sup>13</sup>.

Continuing the theme of using new methods to look at utilitarian objects, Julie Dunne, presenting on behalf of herself and colleagues<sup>14</sup> examined the inception of dairying in Holocene North Africa, using organic residue analysis on ceramic sherds. This technique can reveal much about the ancient diet, as the lipids that are extracted from the pots come from the fats, oils, and waxes of the substances stored or cooked in the vessels. Mainly focused on Algeria, Libya, and the Sudan, the results presented show that the exploitation of milk and milk products occurred contemporaneously (in the seventh millennium cal BP) in the Mediterranean, the Nile Valley, and Saharan North Africa. The use of secondary products, such as dairying, now appears to have occurred concurrently with the first exploitation of domesticates, and played an important role in the subsistence economies of Neolithic peoples.

Session Two moved from the micro to the macro. “Modelling Neolithisation” was chaired by Nick Barton. It looked at the process of Neolithisation on a

10 Clark 1965a; Clark 1965b.

11 Marinova, Filipović, et al. 2012/2013; Marinova and Krauß 2014.

12 Not published in this volume.

13 Lucarini, Radini, et al. 2016; Lucarini and Radini 2020.

14 Not published in this volume.

large-scale, and the various means that enabled its spread over large distances. Katie Manning and Adrian Timpson<sup>15</sup> then stayed in North Africa to look at the peopling of the “Green Sahara”. The timing and development of Holocene human occupation in the Sahara has been linked to climate change, demography, and cultural adaptation for a long-time. Using summed probability distribution from 1011 calibrated <sup>14</sup>C dates gathered from Epipalaeolithic and Neolithic sites, a major and rapid demographic shift can be seen to have occurred in the African Humid Period (10 500 cal BP and 5500 cal BP),<sup>16</sup> which was interpreted as revealing that climate was the prime factor driving broad-scale population dynamics in Northern Africa. The movement of people into what is now arid desert appears to correspond with changes in the environment; as the climate became wetter new plants and animals populated this region, and as the region became again more arid, people sought refuge in the better-watered regions, such as oases and the Nile Valley.

Moving from North Africa to the islands of the Mediterranean Sea, Helen Dawson examined the Neolithisation of these often overlooked pieces of land, showing that many were first colonized during this period. However, many of the larger islands (Sicily, Sardinia, Corsica, Crete, and Cyprus) were colonized prior to the Neolithic and an increasing number of smaller islands in the Aegean (see H. Dawson in this volume). Dawson suggested that after the Neolithic, an island’s size and distance were no longer key parameters affecting colonization. As people began to use boats and ships more frequently, communities were more able to overcome geographical constraints and sustain long-term population through economic and social interaction.

Moving to the north coast of the Mediterranean, Marcello Mannino<sup>17</sup> presented on the isotopic research that he has been carrying out with colleagues. This paper examined the use of AMS radiocarbon dating and stable isotope analyses (carbon, nitrogen, and sulphur) on bone collagen of domestic fauna from Neolithic levels at Grotta dell’Uzzo.<sup>18</sup> These new analytical methods provided data on the timing, origin, and management of domesticates at the inception of the Neolithic in north-

western Sicily. Long-distance maritime voyages were indicated, highlighting the need to rethink the mode and trajectories of the dispersal of agro-pastoralism across the Mediterranean, and also the role of islands in this movement.

Moving eastward from Italy into the Balkans, the last paper in this session was presented by Marc Vander Linden on behalf of himself and colleagues (see M. Vander Linden et al. in this volume). He examined the various means by which the Neolithic process moved across the Balkans, presenting findings on the two streams of Neolithisation that swept across the Western Balkans (one along the Adriatic coast with the *Impresso* culture and the other overland across the continent with the *Starčevo-Körös-Criş* complex). The use of a suite of radiocarbon dates allowed comparisons to be made on the pace and spatial structure of each stream. Differences were noted in preferences for animal and plant domesticates between the streams, but there were several shared factors.

The papers in Day Two’s (Saturday 31st October) morning session dealt with “Transitions to Food-Producing Economies,” a very central theme within our discussions, looking from regional perspectives. The regions covered included Morocco, Nubia, and Egypt. The session was chaired by Steven A Rosen, whose work focuses upon the Levant and the Negev. Discussion of a range of regions within this session allowed for stark comparisons and also for contrasts to come to the fore. The starting place for the session was Morocco and the Epipalaeolithic, as Nick Barton examined the period before the introduction of farming (see N. Barton et al. in this volume). Barton examined potential reasons why groups already living in certain cave sites in Morocco, notably the study he and his team made of Taforalt, experienced a significant rise in particular types of foodstuffs, as well as the appearance of the first cemeteries. One of the reasons he explored featured frequently throughout the workshop: the climate. Barton also considered the extent to which the changes witnessed in the cave sites data could be in response to the wider shift to more sedentary lifeways. Certainly, this type of shift was quite early in the region and he shows how the changes did not result in full agriculture. The diversity, in terms of

15 Not published in this volume.

16 Manning and Timpson 2014.

17 Not published in this volume.

18 Mannino, Talamo, et al. 2015; Mannino, Lightfoot, and Stevens 2016.

which areas did and did not maintain and develop agricultural practices, was a very striking outcome over the two days of the workshop.

The geographic focus remained in Morocco, in the northeast, as Jörg Linstädter moved on to examine the transition to the Neolithic.<sup>19</sup> Through examination of the material culture, as well as the botanical and faunal record, Linstädter highlighted how close the Neolithisation processes are to those in the Western Mediterranean. Environment was focal again as he considered the relationship between certain subsistence strategies and the semi-arid environment.<sup>20</sup> The importance of palaeoenvironmental reconstruction within a sound chronological framework, another key theme within the discussions, was also focal in this paper, with the earliest evidence for plant cultivation being cited in northeast Morocco at ca. 7600 cal BP. Linstädter concluded that the environment and climate had a significant impact upon prehistoric Holocene settlement in the region, rather than upon the actual Neolithisation processes in northeast Morocco, which appear to have been largely related to other cultural processes, the spread of which was encouraged by the maritime networks possibly in existence in the Epipalaeolithic.

Maria Carmela Gatto turned the focus for the remainder of the morning to the east, as she reviewed recent and older data and how they can inform the process of Neolithisation in Nubia (see M. C. Gatto in this volume). Various factors in the process of Neolithisation were examined: economic, ecological, social, and cognitive. This process was tracked from its beginning during the Last Glacial Maximum (24 000 cal BP) to a full food producing economy (6800 cal BP), within the framework of Bruce Smith's influential theory on the four stages to food production.<sup>21</sup> Smith's article on low-level food production was also utilized by Barich in her lecture and again by Tassie in his paper. In Nubia a multi-spectrum economy seems to have developed, with communities along the Nile mainly relying on fishing and foraging/farming, while those in the desert mainly lived on animal husbandry and hunting.

Two papers brought the region of interest to Egypt, the first reviewing 100 years of research into the Neolithic as Agnieszka Mączyńska brought us up to date

slowly on the progress of archaeologists working in prehistoric contexts, notably the boom of research into the Neolithic in the 1920s and the impact of scholars such as Childe (see A. Mączyńska in this volume). Mączyńska looked at how our research into the Egyptian Neolithic has been punctuated by key methodological changes, as well as new discoveries. Notably, she discussed the availability of radiocarbon dating, as well as the much-debated discovery of presumably domesticated cattle at Nabta Playa, which have driven new research perspectives. Perhaps surprisingly, she discussed how despite the rise in scientific methods being applied in prehistory, Egypt remains somewhat behind in terms of research into the processes of Neolithisation when compared to other regions.

One of the sites that Mączyńska introduced, Merimde Beni Salama, was the focus of Joanne Rowland's discussion, as she began her re-evaluation of the Neolithic data from the site (see J. M. Rowland in this volume). Rowland picked up upon some of the analyses introduced in the previous discussion, stressing the impact that they can have on newly excavated contexts, as well as data from former excavations. She presented the first ever set of AMS radiocarbon dates from this unique farming site in the Western Nile Delta, discussing the extent to which data from former excavations can be of serious scientific value, as well as looking to the future to suggest what methods may still have an impact on museum-based material.

The afternoon session's focus was on cultural, environmental, and technological processes, chaired by Maria Carmela Gatto. Annett Dittrich moved the focus down to the Sudan to Mograt Island and the theme of Holocene riverscape dynamics (see A. Dittrich in this volume). This discussion was concerned with the impact of the rain and dropping river levels in the eighth millennium cal BP leading to major changes in occupation strategies. The farming methods that might have been employed were considered, an aspect that can be difficult to approach but which played a major part within Dittrich's discussion. Although we normally think about the dependence of agriculture on the yearly rainfall, she also noted other existing methods of irrigation.

<sup>19</sup> Not published in this volume.

<sup>20</sup> Linstädter, Broich, and Weninger 2018.

<sup>21</sup> Smith 2001.

Karin Kindermann and Heiko Riemer moved the geographical focus into the Eastern Sahara to investigate the origins of the Neolithic (see K. Kindermann and H. Riemer in this volume). They highlighted the multiple causes that impacted early food-producing communities, including environmental and climatic impacts, as well as communication between communities. They noted the early date of domesticated species in this area by 8000 cal BP onwards within a very different cultural landscape to the first Neolithic evidence in the Nile Valley or Delta. This exhibits yet another different aspect of the Neolithic, with pottery production and increasing social complexity existing amongst hunter-gatherer communities. The great similarity in terms of the lithics between oases sites and the Faiyum Neolithic was noted, suggesting the origins of at least some communities within the Eastern Sahara.

Moving to the northeast, Steven A Rosen's contribution dealt with the processes of Neolithisation in the Levant (see S. A. Rosen in this volume). This discussion, in many ways, brought up aspects that were becoming increasingly clear as the conference progressed, notably, just how different the appearance, nature, and uptake of Neolithic aspects are dependent upon the history of the area, and the extent to which environmental and climatic change impacted upon different regions in varied ways and affected the timing of change. Rosen looked to the existence of specific processes within Neolithisation – from the adoption of species by desert groups, their transition to herder-gatherers with a changing toolkit, to more permanent settlement at a large-scale, in terms of population.

Opening the final part of the session, Noriyuki Shirai tackled the issues of how human groups dealt with adapting domesticated species within the Egyptian environment (see N. Shirai in this volume). Shirai's focus was the lithic repertoire from the Faiyum, as he examined the adoption of technological innovation and the importance of considering two key local factors at the time of adoption, notably, the population and the carrying capacity of the local environment. Shirai approached these issues from the standpoint of cultural evolutionary theory.

The final discussion remained within Egypt, in this instance Northern Egypt, as Geoffrey Tassie applied a multiple-scale approach to aspects of Neolithisation in this region (see G. J. Tassie<sup>†</sup> in this volume). Tassie

looked to balancing the issue of large-scale adaptations, but also stressed the importance of taking local change into account and looking at changes that occur over a longer timescale, as well as in the shorter-term. Tassie emphasized the need to focus upon the different ways in which domesticated animals and plants arrived in Egypt, and the impetus for the movement of plants, animals, and people from the Levant. Tassie was concerned with the four key sites in Egypt essential within this research, notably, Merimde Beni Salama, el-Omari, Sais, and the Faiyum, examining the changes that occurred at these sites.

The Revolutions Workshop was initially envisaged as a means to bring together a group of archaeologists and related specialists to highlight key research themes and areas of progress, as well as outstanding issues relating to our research into Neolithic contexts. This aim was conceived with the main purpose of pushing forward the research of like-minded (and not so like-minded) colleagues through a coming together in a forum conducive to sharing new results, theories, new ideas, new techniques, and methods, with plenty of time set aside for discussion. Discuss we did – each session was accompanied by about 45 minutes of round table discussion, firstly between the panel members from the foregoing session and then the floor was opened to all workshop delegates, which promoted some additional fruitful lines of discussion. The workshop culminated in a much longer roundtable discussion among the delegates, re-visiting the topics that had been presented over the preceding days.

Some key elements that came through in the papers were, unsurprisingly, the importance of a robust chronological framework for charting processes of Neolithisation, and a number of papers raised the issue of climatic change. What was also apparent is that in many cases global climatic change was cited as of importance, notably the abrupt 8200 cal BP cooling event. However, this highlighted a point quite clearly – that it is crucial that we all look to obtain as much specifically local climatic and environmental data as possible, and avoid trying to pin changes upon such global events. This was demonstrated in the paper by Annett Dittrich, Barbara E. Barich, Nick Barton, Jörg Linstädter, Marc Vander Linden, and Maria Carmela Gatto, amongst others.





Fig. 1 Revolutions Workshop participants outside the Topoihaus: *Top Row* (L-R): Heiko Riemer, Mennat Allah El-Dorry, Maria Carmela Gatto, David Warburton, Fekri Hassan, Geneviève Protière Lebrun, Annett Dittrich, Nick Barton, Karin Kindermann, and Marc Vander Linden; *Middle Row* (L-R): Julie Dunne, Barbara E. Barich, Giulio Lucarini, Veerle Linseele, Helen Dawson, Jörg Linstädter; and *Bottom Row* (L-R): Noriyuki Shirai, Agnieszka Mączyńska, Geoffrey J. Tassie†, Joanne Rowland, Marcello Mannino, Graeme Barker, Steven A Rosen.

The workshop also served as a very effective forum for contacts between colleagues working with specific methods and, notably, for the Neolithic of the Delta project; Rowland subsequently entered into collaboration with Dunne to reveal the still present lipids from ca. 7000–6000 cal BP in a whole range of ceramic types from Merimde Beni Salama.<sup>22</sup>

The nature of direct or indirect transmission of technology was another major discussion point with varied views put forward from the colleagues present, and again very much connected with local resources, and coming hand-in-hand with other domesticated species. The idea of a ‘Neolithic package’, where all elements spread out of a core area at the same time was generally rejected in favor of a more gradual spread of various elements. The conference title was perhaps somewhat partly provocative, highlighting also the issues with using the term Neolithisation at all – and certainly at any pretense that there are a set of processes that play out in a similar manner in different areas. Although many aspects remain far from clear, what is plain is that the archaeological contexts presented and discussed throughout the workshop suggest that many factors led to the uptake – or not – of

a few, or many, aspects of what was originally coined as the ‘Neolithic package’, and that there is huge diversity in terms of what is adopted on a more permanent basis. As Veerle Linseele highlighted, caprines spread out of the Levantine core area several hundred years prior to domesticated plants, however, cultivation and use of wild plants had been taking place already in both North Africa and Europe in the Epipalaeolithic/Mesolithic, as highlighted by the research of Giulio Lucarini and Anita Radini, and that of Elena Marinova.

It is hoped that a similar workshop can take place again in the coming years, with additional colleagues present, to chart the progress of research into the Neolithic. The bringing together of people who normally focus on evidence from either the northern or southern regions of the Mediterranean basin added new dimensions to the discussion. Looking at the processes that led to the development of food production at a supra regional level allowed us to recognize with more clarity the similarities and differences, and reminded everyone that the events that occurred in the ninth to seventh millennia cal BP occurred over a very large, and very interconnected area.

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