ITALIAN ENCLOSURES

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Introduction

Just over twenty years ago, I wrote an undergraduate essay on the Neolithic enclosures of Italy. It was a fundamentally typological exercise that summarised the form, date, and distribution of these structures and their associated settlements. I found it unsatisfying because I felt unable to imagine the people who had built and used the enclosures. Since then I have attempted a more anthropological approach to the interpretation of life in central Mediterranean prehistory, drawing upon current social theory, a detailed and critical reading of the ever-expanding primary literature by Italian and foreign archaeologists, and first-hand experience of sites and museums in the region. This new essay continues that process in relation to the Italian enclosures (Figure 1).

Archaeological research on these structures has continued for about 100 years. First excavations were undertaken in the late nineteenth and early twentieth centuries, around Siracusa in southeast Sicily by Orsi and around Matera in Basilicata by archaeologists such as Patroni, Ridola, and Rellini (e.g. Orsi 1890; Patroni 1898). Aerial reconnaissance during World War II then led to Bradford's celebrated discovery of hundreds of ditched enclosures on the Foggia Plain or 'Tavoliere' in northern Puglia, and to the post-war investigation of some of these on the ground by a British team (e.g. Bradford and Williams-Hunt 1946; Jones 1987). Since the mid-1960s, new discoveries and excavations of Neolithic enclosures have fairly constantly occurred throughout Italy, with highlights being Manfredini and Cassano's work on the Tavoliere in the 1970s and 80s, Camerini and Lionetti's work in Basilicata in the 1990s, and the recent large-area excavations of enclosures in northern Italy (e.g. Bernabò-Brea et al. 2003; Camerini and Lionetti 1995; Cassano and Manfredini 1983). New high-resolution magnetic surveys and experiments in phenomenological archaeology were also undertaken at some of the Tavoliere ditched villages (e.g. Ciminale et al. 2007; Hamilton and Whitehouse 2006). However, our knowledge of the construction, use, and transformation of these sites remains limited, particularly compared to Neolithic enclosures in central and northwest Europe. This is especially due to the generally small-scale excavation at most of them, which often focused on the relative chronologies revealed by ditch stratigraphies. Published interpretations of the Italian enclosures traditionally categorised them in terms of single functions, such as defence of villages and resources, control of domestic animals, soil containment, drainage, clay extraction, and - more recently - the visible definition and division of corporate social space and identity, and of sacred space (e.g. Barfield 2002; Morter 1990; Robb 2007; Skeates 2005).

In this essay, my aim is to work against the grain of this tradition by emphasising past people's dynamic and variable design, construction, use, and transformation of the enclosures and associated environmental resources, cultural materials, and activities, over space and time, in and around key places in the landscape (cf. Skeates 2000). At the heart of my narrative is an emphasis on diversity: of the built material forms of these structures, of the affordances of their environmental and cultural contexts, of the real people who lived through the enclosures, and of the purposes they served (cf. Darvill and Thomas 2001).

The Tavoliere

Circular or oval enclosure ditches, sometimes strengthened by stone walls, were characteristically constructed by Neolithic communities on and around the Tavoliere Plain in northern Puglia. Indeed, it would appear that cultural tradition determined that almost all settlements were enclosed by ditches across this extensive lowland region; an exception being the apparently unenclosed cluster of ditched compounds identified from the air at the marginal site of Masseria La Lamia at the foot of the Apennines (Jones 1987). However, variability, particularly chronological, did occur in this tradition. A core data-set is provided by some 60 ditched sites investigated through field-survey, magnetic survey, and excavation, whilst hundreds more have been photographed from the air.

Right from the start of the Neolithic in the relatively open Tavoliere landscape, early farming communities using Impressed Ware dug ditches around their small villages, enclosing areas of up to four hectares. Ditches were at least one to two metres deep and between 1.6 and 3.4 metres wide, and usually dug into a relatively soft and easy-to-work *crusta* substrate (a conglomerate of sand, clay, pebbles, and calcareous concretions), which could have been used as building material. The completed ditches had vertical or slightly concave sides, and generally flat bases, and could have served a variety of inter-related purposes, including stock-containment, defence of resources, and definition of corporate domestic space and identity. The earliest securely radiocarbon dated examples, assigned to the late seventh and early sixth millennia BC, are Masseria Giuffreda and Coppa Nevigata (Guilaine *et al.* 1981, 156; Hedges *et al.* 1989, 226). The sources of this cultural tradition are debatable, but at least an initial input from members of pioneer agricultural communities from across the Adriatic Sea is likely. In northern Greece, for example, a comparable tradition of settlements enclosed by ditches and walls existed throughout the Neolithic.

Ditches appear to have remained open for some time. Indeed, this was probably intended, since their inner sides were often revetted by dry-stone walling. Nevertheless, the villagers sometimes dug additional ditches, following (and occasionally intersecting) earlier ones, which sometimes resulted in multiple concentric circles of successive ditch circuits. The labour implications are considerable, both in terms of scale and organisation, but we should avoid evaluating these with reference to modern economic concepts of time and energy expenditure (e.g. Brown 1991a). Community members further strengthened these boundaries by occasionally placing symbolic deposits in their bases, including human remains. For example, at Masseria Candelaro (or Valente), the relatives of a deceased adult woman dug a cavity into the inner wall of the ditch and placed her crouched body there, together with a few pottery fragments and some colourful bauxite nodules (Salvadei and Macchiarelli 1983, 253-9). A somewhat less formal burial process may have taken place in the village ditch at Ripa Tetta, according to a biographical study (Robb et al. 1991). First, the complete body of an adult man was placed face-up about 35 centimetres above the ditch base. Then, during initial decomposition, major body parts were dispersed by scavenging carnivores. Next, the bones lay disarticulated at the bottom of the ditch and were further disturbed by flooding, fire, and animals. Finally, the remaining bones were buried by natural sediments and rocks. At other sites, the outer enclosure ditches were also gradually filled with a stratified combination of cultural remains and naturally eroded deposits.

Over a much longer time-span, a few later Neolithic communities created much larger ditched enclosures. These communities produced and identified themselves with more refined, colourful, and distinct styles of pottery, and at least some were formed by a process of settlement nucleation (Brown 1991b). Their sometimes huge enclosure ditches, up to four metres deep and 6.1 metres wide, delineated inhabited and more open areas of up to 28 hectares, and formed cumulative patterns of up to eight concentric circles. For example, four can be seen from the air at Masseria Palmori (Figure 2). At Masseria Fonteviva, these multiple enclosure ditches clearly resulted from a dynamic process of growth (Trump 1987). Here, an early oval ditch was later incorporated in the eastern corner of a larger enclosure, in turn complemented by the later attachment of a third enclosure to the southwest. By the end of the Neolithic, literally hundreds of ditched villages had been constructed, reconstructed, and abandoned across the Tavoliere, extending inland from the marshy lagoons of the Adriatic coast, along the terraces of lowland watercourses, to the Apennine foothills, through long-term processes of population growth and settlement fissioning which left an indelible mark on the landscape.

In those areas of the Tavoliere where sites have been most intensively mapped (e.g. Cassano and Manfredini 1983; Cassano et al. 1987; Jones 1987), enclosures clearly incorporated and transformed key places in the landscape. They enclosed the summit, scarp-edge, or foot of relatively prominent and well-drained low hills, which afforded diverse sensory connections of the wider world (Hamilton and Whitehouse 2006), and good 'ecotonal' access to diverse resource zones (Delano-Smith 1987, 23). Women, children, and men would have routinely brought such resources in and out of their enclosed villages, including fresh water, raw materials for a range of structures and artefacts, cereals and legumes, domestic and wild animals, edible marine and terrestrial molluscs, fish, and birds. Aerial photographs indicate the types of entrances to these enclosures, rangeing from simple gaps, to in-turned funnels, to out-turned semi-circles or 'lunettes' (Jones 1987, 191-4). Although few of these entrances have been investigated on the ground, they clearly controlled the movement of people and resources, perhaps especially herds of sheep/goat and cattle. The ditched enclosures were, then, effective but permeable boundaries, connecting as well as contrasting the villagers' core routines of domestic life to surrounding cultural environments and experiences, including threats and opportunities presented by members of other enclosed communities.

Inside the Tavoliere enclosures, a range of domestic structures have been excavated. Some rectangular or trapezoidal, wooden-framed, wattle-and-daub houses were identified at sites not affected by modern deep-ploughing, such as Contrada Casone, Lagnano da Piede, Masseria Monte Aquilone, and Ripa Tetta (e.g. Costantini and Tozzi 1987; De Juliis 1972; Mallory 1984-7; Manfredini 1972). They are four to 4.5 metres long, and three to four metres wide. They were sometimes built on drystone wall foundations, with compacted earth floors, and occasional raised hearths of plaster. Other domestic features include extensive cobbled pavements used as multipurpose work areas; rows of post-holes; small channels; and various hollows, pits, and cavities -used as silos, wells, and cisterns, or for special deposits incorporating articulated and disarticulated human remains. Combinations of these structures were often enclosed by a small, continuous, and usually single, C-shaped ditch. These measure between 0.6 and 2.8 metres deep, one to 3.5 metres wide, and enclose spaces with a diameter of between 12 and 46 metres. On the Tavoliere, their openings are often oriented in approximately the same direction (Jones 1987), as at Masseria Centonze, where the 'C-ditches' are all oriented north and aligned along the long-side of the oval outer enclosure (Cassano and Manfredini 1983), indicating the internal ordering of domestic space and behaviour.

The stratified fills of these smaller C-ditches suggest that their life histories matched those of the family-based households they enclosed. Initially they were dug and kept open, their inner sides sometimes revetted or built up by stone walling, presumably during the formation and occupancy of their associated households. The remains of a few deceased individuals were sometimes inhumed in small cavities carved into the sides of ditch bases, accompanied by broken pottery and a few tools, perhaps on the death of significant household members. At Masseria Fonteviva, a domed chamber cut into the lower side of a C-ditch contained the articulated bodies of two adult women, separated by a 25 centimetre deposit, as well as skull fragments from a child (Denston 1987). Over time, some of these inner enclosures were remodelled in successive phases, with the fill of earlier ditches sometimes revetted by a few stones when intersected by new ditches. But in due course all C-ditches were gradually filled by naturally forming deposits containing significant quantities of food remains, artefacts, and the structural remains of houses, especially following the abandonment and collapse (perhaps even intentional destruction) of domestic structures and their associated households. At relatively small early Neolithic sites, just a few C-ditches were constructed, but many more were dug at later and larger sites. For example, over 100 are visible from the air at the mega-site of Passo di Corvo (Bradford 1950, 86), although this represents a cumulative pattern.

The histories of some of these sites continued over an even longer time-scale, following their widespread abandonment as settlements in the fifth millennium BC, possibly triggered by a desiccation of the Tavoliere, and the establishment of a new dispersed settlement pattern in northern Puglia. Indeed, some of these places, especially their part-filled ditches, retained an historic and symbolic, even monumental, significance for final Neolithic groups still based in and around the Tavoliere, who sometimes used them for primary and secondary burial. For example, at Fontanarosa Uliveto a small stone cist containing a secondary burial was constructed on top of a filled enclosure ditch, using slabs of *crusta* extracted from the side of the former ditch (Manfredini 1987).

Southern Italy

Enclosures formed by ditches and/or stone walls were characteristically constructed by Neolithic communities elsewhere in southern Italy (in the generally dry regions of Sicily, Calabria, Basilicata, and southern Puglia). However, variations can also be identified here, particularly over time.

A widespread and enduring ditch digging tradition, with close similarities to the more elaborate tradition of northern Puglia, was established particularly in southern Puglia, Basilicata and southeast Sicily at the start of the Neolithic. Agricultural communities dug curvilinear ditches around their settlements, usually situated either on hilltops or on lower-lying river and stream terraces, cutting them into the relatively soft limestone. At least 24 such sites are known. The completed ditches generally formed single and more-or-less continuous circuits, with one or two entrances, some in the form of a 'lunette'. At Murgia Timone, a simple four metre wide opening was flanked by a pair of post holes, presumably supporting a wooden gate, while a lunette was strengthened and controlled by a walled structure (Lo Porto 1998). More unusually, Murgecchia near Matera boasts two almost concentric ditches, and at Matrensa near Siracusa the enclosure seems formed by discontinuous stretches of ditch (Ridola 1926). The ditches reached depths and widths between one and four metres. At least some were strengthened internally by dry-stone walls. For example, at the Stentinello site of Megara Iblea (Siracusa), a regularly laid stone wall about 1.8 metres wide crowned both sides of the ditch (Orsi 1921). However, at Murgia Timone near Matera, in the possibly more wooded Murge uplands in Basilicata, a wooden palisade was constructed along the inner edge of the ditch (Rellini 1929). Smaller C-shaped enclosure ditches have also been identified in and around a few settlement enclosures, as at a pair of sites near Lavello in northern Basilicata (Bianco and Cipolloni-Sampò 1987, 308; Cipolloni-Sampò 1987). Traces of other interior structures and artefacts at these settlements are similar to those on the Tavoliere. The ditches were eventually filled with this cultural material, either rapidly, as at Stentinello near Siracusa, where a lack of clear stratigraphic divisions in the ditch may indicate a single filling episode (Tinè 1961), or gradually, as at Masseria Fragennaro in the Murge, where the ditch contained five strata slowly deposited over the course of the later Neolithic (Venturo 1996).

At some sites, the outer ditches were strengthened symbolically by constructing special features and depositing material in their bases, which highlighted liminal connections and boundaries between communities of the living and the dead. For example, the east ditch at Serra d'Alto near Matera contained three crouched inhumations: one right in the bottom, and two in niches cut into the outer wall of the ditch (Rellini 1925). At Santa Barbara near Polignano a Mare (central Puglia), the 'Manfredi hypogeum' was dug into the inner side of a later Neolithic settlement enclosure ditch (Geniola 1987) (Figure 3). It is nine metres long, and has a symmetrical plan. A sloping ramp leads to two underground chambers, linked by a short central corridor. Deer skulls were arranged along the walls of the ramp and first chamber, while small niches and a cross-shaped symbol were engraved in the walls of the second chamber. A small trench with human remains was found in the back room. The hypogeum also contained a stratified deposit, with animal bones dominated by roe deer, small piles of limpets, some Spondylus shells, fragmented jars and cups in the Serra d'Alto style, and flint, obsidian and bone tools. The main period of use of this ritual structure was the late Neolithic, radiocarbon dated here to ca. 5250 - 4550 BC, although sherds of Diana-Bellavista pottery indicate continued use during the final Neolithic, at roughly the same time as the formation of a new settlement just outside (and therefore in relation to) the perimeter of the later Neolithic enclosure.

Stone walled settlement and household enclosures have also been discovered at some eight Neolithic settlements in southern Italy (none of which appear to have had ditches). Suggested analogies for these stone compounds are later Neolithic Aegean sites, such as Sesklo or Dimini in Greece (La Rosa 1987), although the nature and scale of any cultural influence remains unspecified. But the local significance of these structures, many added to natural boundaries in the landscape, and some with a clearly defensive dimension, should not be overlooked.

The best evidence comes from three relatively extensively excavated later Neolithic sites in southern Sicily and Calabria, all assigned to the fifth millennium BC late Stentinello culture. At Piano Vento in the Agrigento province, a 2.3-2.5 metre wide outer enclosure wall extended almost completely along the defensively exposed south and west slopes of the hilltop, over at least 400 metres (Castellana 1986). Three access passages were revealed along the excavated 50 metre section; the first comprises an access ramp of limestone blocks, three metres long and 1.6 metres wide, the other two comprise 1.8 metre wide rock-cut hollows. Within the enclosure, circular and rectangular houses with stone foundations and wattle-and-daub superstructures were identified, associated with stone walled compounds, stone pavements, and clay-lined pits. Following the abandonment of this residential site, the enclosure was re-used to define the sacred space of a large final Neolithic cemetery.

At Serra del Palco, north of Agrigento, a larger rectangular compound replaced an unenclosed settlement of oval huts (La Rosa 1987). Its walls were up to 1.5 metres thick. The compound measured 20 metres long and 12 metres wide, and was divided in two by an interior wall. A large house, 9.5 by 6 metres, was repeatedly re-built in the larger area, while the smaller area could be a storage area or stock pen. Similarly, at Capo Alfiere in Calabria, a rectangular enclosure of roughly 13 by eight metres contained a wattle-and-daub house with a plastered floor, surrounded by cobble paving (Morter 1990; 1999). The compound wall was formed by multiple courses of stone with some very large boulders. It was set within a foundation trench and flanked on both sides by vertical stone slabs. Material resources were brought into, ordered, transformed and deposited within this enclosed domestic space. They included pottery vessels, stone tools (some made of imported materials), cereals and legumes, a grape, an acorn, large and smaller domestic animals, a few wild animals, birds, fish, and molluscs. These walled communities and households were thus protected from, but also constructed out of and embedded within, their wider cultural landscapes and communication networks.

A few sites in southern Puglia and Basilicata were also enclosed and sometimes sub-divided by stone walls, although the published evidence here is less clear. For example, at the earlier Neolithic settlement of Fondo Azzolini near Bisceglie (central Puglia), dated to the late seventh and early sixth millennia BC, a settlement enclosure wall, perhaps extending over a distance of 70 metres, runs across a slightly sloping plateau towards a large doline, the Pulo di Molfetta (Radina 2002). The wall is around two metres wide and formed by two parallel rows of large limestone slabs and a fill of smaller stones. At earlier Neolithic Trasano in Basilicata, two smaller walls, between 0.85 and 1.3 metres wide, divided the settlement into two sectors (Guilaine and Cremonesi 1987). This tradition of walling was also maintained into the later Neolithic, as indicated by the enclosure wall built around the three most defensively vulnerable sides of Sant'Anna near Oria in southern Puglia (Ingravallo 1997).

Central Italy

A simplified version of the well-established south Italian ditch digging tradition also spread north, from the late sixth millennium BC, with the selective transmission of the 'Neolithic package' from southeast to central Italy via pioneer colonist farmers and indigenous groups of Mesolithic ancestry. But only around five ditched sites have been excavated, both east of the Apennines (in Abruzzo and Marche) and to the west (in Umbria and northern Lazio). Little is known about their construction and use, and whether the many other Neolithic sites in this region were also enclosed in some way. The earliest known example is the small, discontinuous ditch at the Adriatic Impressed Ware site of San Marco near Gubbio in Umbria, dated to between the midsixth and mid-fifth millennia BC (Malone and Stoddart 1992). It was 1.5 metres wide, and a set of large ceramic containers was deposited in it. A later example is the huge ditch partly surrounding the late Neolithic settlement of Ripoli in the Vibrata Valley in northern Abruzzo (Cremonesi 1965). The ditch measured up to 4.8 metres deep and 7.5 metres wide, and incorporated the edge of the Pleistocene terrace upon which the site lay. Its size may have helped to express the social prominence of the nucleated community it enclosed, which stands out from contemporary sites in east-central Italy through its extent, its relatively high proportion of prestigious cattle, its distinctive and influential style of fine painted pottery, its import of a wide range of valuable goods, and its long duration. At various points in its history, one side of this ditch collapsed, and another section was re-cut to make the ditch deeper, wider, and straighter. Eventually, the ditch was filled with settlement debris. In the final Neolithic, a line of 10 ditches was also cut across the middle of the ancestral site and filled with the remains of over 45 adults and one child.

Northern Italy

Another variety of enclosures was constructed by communities, belonging to a series of hybrid colonist and indigenous cultural traditions, around large villages in the more temperate and forested environment of northern Italy. Here, some 11 enclosed sites have been excavated, both to the south of the Po Valley (in the Emilia-Romagna) and to the northeast (in Veneto, Trentino, and Friuli). How representative or exceptional these sites are in terms of north Italian Neolithic settlement forms is unclear, since they are also amongst the most extensively excavated sites in the region.

At a few early Neolithic sites in Emilia-Romagna where potters conformed to the east-central Italian Adriatic Impressed Ware style, villagers followed the southern tradition of ditched enclosures, although they more often incorporated and modified natural ditches as part of these. This is particularly clear at Fornacce Cappuccini near Faenza, where archaeologists uncovered a 680 metre long semi-circular section of a wide ditch surrounding an extensive settlement (Antoniazzi *et al.* 1987). Here, the ditch-diggers joined, straightened, and widened sections of a pre-existing natural channel eroded into alluvial deposits. During the early and middle Neolithic, this structure was then gradually filled with domestic debris from adjacent living areas.

But large wooden palisades, combined with ditches and/or earth walls, were more commonly constructed by villagers belonging to the more northern-oriented early Neolithic Fiorano Culture in Emilia-Romagna and to successive cultural traditions. For example, at the vast Squared-Mouthed Pottery Culture (VBQ) settlement of La Vela near Trento, dated to the fifth millennium BC, the middle Neolithic community strengthened the pre-existing early Neolithic enclosure ditch by inserting large vertical wooden elements into it and packing large stones around their bases (Degasperi et al. 2006). At the Fiorano Culture site of Lugo di Romagna, dated to the second half of the sixth millennium BC, the villagers used all three elements to delimit their settlement (Degasperi et al. 1996) (Figure 4). A slightly curving 20 metre section of a large palisade was uncovered here, formed by three metre long and 0.6 metre wide planks of longitudinally split oak set vertically, one against the other, into a foundation trench packed with clay. This trench also contained the anatomicallyconnected right foot of a dog, covered by a decorated ceramic jug, interpreted as evidence of a foundation rite. Four metres outside this, regularly spaced post holes may indicate a wall of wood and earth. Beyond this, a series of intersecting elongated pits formed a small ditch, one metre wide and 0.6 metres deep, whose contents may have been used to construct the wall. By contrast, at the VBQ settlement of La Razza di Campégine near Reggio Emilia the enclosure was formed exclusively by a wooden palisade (Bernabò-Brea et al. 2003). One side of this measures just over 300 metres long, and comprises 215 largely equidistant cylindrical post-holes. The grand human scale of these palisaded enclosures, including their environmental impact, their laborious construction, their monumental final form, and - in the case of Lugo di Romagna – its spectacular destruction by fire, should therefore not be underestimated.

The north Italian enclosures drew, then, a bold line around the living areas and domestic life of well-established communities. Inside, settlement features include numerous pits, some ditches, shallow channels, and post-holes, rare human burials, and a few rectangular wattle-and-daub houses. At Lugo di Romagna internal structures included a two-roomed rectangular house, measuring 10 by seven metres, with a timber frame and wattle-and-daub walls (Degasperi *et al.* 1996). At some sites, occasional smaller internal enclosures have also been defined, in the form of palisades set in foundation trenches or, in one case, a cobble-and-clay wall. For example, at the later Neolithic VBQ settlement of Monte Rocca near Rivoli di Verona, an interrupted ditch alignment, running for 22 metres across the middle of the site, has been interpreted as the foundations for a palisade effectively dividing the settlement in two equal halves (Barfield 2002).

All these enclosures comprised permeable boundaries, crossed by people and their resources. For example, a series of two-metre wide entrances were identified at the palisade at La Razza di Campégine. At the Fiorano Culture settlement of Lugo di Grezzana near Verona, symbolic attention was drawn to the significance of an entrance by depositing a rare fragment of the foot of a ceramic anthropomorphic figurine in a post-hole flanking a gap in the palisade (Cavulli and Pedrotti 2001). Passing in and out these key access points, members of the bounded communities maintained a two-way flow of essential resources between their inner living areas and the wider world to which they were connected. The enclosures and their entrances channelled this flow in a regulated manner, at the same time constraining the movement of people and information.

Conclusion

In Neolithic Italy, enclosures were intimately related to the domestic practices, cultural traditions, and long-term histories of settled agricultural communities and their constituent households. The origins of this practice, found mainly in the eastern regions of peninsular Italy and Sicily, can ultimately be traced to the Balkans, and contrasted with the more ceremonial use of uninhabited monumental enclosures in central and northwest Europe. This tradition determined that almost all settlements were enclosed on the Tavoliere, right from the start of the Neolithic, and then again and again in a dynamic process of construction, reconstruction, and abandonment, until the underlying principle of nucleated settlement eventually became obsolete. But here and elsewhere in Italy laborious acts of enclosure were also selective, mobilised as part of local strategies of spatial ordering, defence, and differentiation. Ditches were the most widespread construction, but varied locally over space and time, while regional variations in culture and environment afforded the greater use of stone walls in the relatively open landscape of the south and the erection of wooden palisades and earth walls in the north. Local topographic features, ranging from water channels to scarp-edges, were sometimes incorporated into the enclosures, as were special deposits highlighting their liminality and history. These physically and symbolically significant structures moulded the lives, experiences and perceptions of the variety of people - differentiated by age, gender, household, and community - who permeated their boundaries to communicate with the wider world and to return home to the places where they belonged.

References

Antoniazzi, A., Bagolini, B., Bermond Montanari, G., Massi Pasi, M. and Prati, L. 1987. Il Neolitico di Fornace Cappuccini a Faenza e la Ceramica Impressa in Romagna. In A. Revedin (ed.), *Atti della XXVI Riunione Scientifica dell'IIPP. Il*

Neolitico in Italia. Volume II, 553-64. Firenze: Istituto Italiano di Preistoria e Protostoria.

Bernabò-Brea, M., Bronzoni, L., Cremaschi, M. and Trombino, L. 2003. Il villaggio Neolitico alla Razza di Campegine. In *Atti del Convegno 'Archeologia ad alta velocità in EmiliaRomagna': Indagini archeologiche e geologiche lungo il tracciato dell'Alta Velocità*. http://www.archeobo.arti.beniculturali.it/pdf/bernabo1.pdf

Bianco, S. and Cipolloni-Sampò, M. 1987.'Il Neolitico della Basilicata. In A. Revedin (ed.), *Atti della XXVI Riunione Scientifica dell'IIPP. Il Neolitico in Italia. Volume I*, 301-20. Firenze: Istituto Italiano di Preistoria e Protostoria.

Barfield, L.H. 2002. An interrupted ditch alignment at Rivoli, Italy, in the context of Neolithic interrupted ditch/pit systems. In G. Varndell and P. Topping (eds), *Enclosures in Neolithic Europe: essays on causewayed and non-causewayed sites*, 59-61. Oxford: Oxbow.

Bradford, J.S.P. 1950. The Apulia expedition: an interim report. Antiquity 94, 84-95.

Bradford, J.S.P. and Williams Hunt, P.R. 1946. Siticulosa Apulia. *Antiquity* 80, 191-200.

Brown, K. 1991a. A passion for excavation: labour requirements and possible functions for the ditches of the '*Villaggi Trincerati*' of the Tavoliere, Apulia. *Accordia Research Papers* 2, 7-30.

Brown, K. 1991b. Settlement distribution and social organisation in the Neolithic of the Tavoliere, Apulia. In E. Herring, R. Whitehouse and J. Wilkins (eds), *Papers of the fourth conference of Italian archaeology. The archaeology of power, part 1*, 9-25. London: Accordia Research Centre.

Camerini, V. and Lionetti, G. 1995. *Villaggi trincerati Neolitici negli Agri di Matera-Santeramo-Laterza*. Matera: Grafiche Paternoster.

Cassano, S.M. and Manfredini, A. (eds). 1983. *Studi sul Neolitico del Tavoliere della Puglia: indagine territoriale in un'area-campione*. Oxford: BAR.

Cassano, S.M., Cazzella, A., Manfredini, A. and Moscoloni, M. (eds). 1987. *Coppa Nevigata e il suo territorio: testimonianze archeologiche dal VII al II millennio a.C.*. Roma: Edizioni Quasar.

Castellana, G. 1986. Il villaggio Neolitico di Piano Vento nel territorio di Palma di Montechiaro: rapporto preliminare. In Soprintendenza ai Beni Archeologici Agrigento and Associazione Archeologica Licatese (eds), *Atti della seconda giornata di studi sull'archeologia licatese e della zona della bassa valle dell'Himera*, 9-67. Licata: Soprintendenza ai Beni Archeologici Agrigento and Associazione Archeologica Licatese.

Cavulli, F. and Pedrotti, A. 2001. L'insediamento del Neolitico antico di Lugo di Grezzana: la palizzata lignea. *Preistoria Alpina* 37, 11-24.

Ciminale, M., Becker, H. and Gallo, D. 2007. Integrated technologies for archaeological investigation: the Celone Valley project. *Archaeological Prospection* 14, 167-81.

Cipolloni-Sampò, M. 1987. Aspetti e problemi della cronologia del Neolitico antico in Italia meridionale: l'insediamento Neolitico sull'Olivento (Valle dell'Ofanto – Basilicata). In A. Revedin (ed.), *Atti della XXVI Riunione Scientifica dell'IIPP. Il Neolitico in Italia. Volume II*, 697-705. Firenze: Istituto Italiano di Preistoria e Protostoria.

Costantini, L. and Tozzi, C. 1987. Un gisement a Céramique Imprimée dans le subapennin de la Daunia (Lucera, Foggia): le village de Ripa Tetta. Économie et culture matérielle. In J. Guilaine, J. Courtin, J.-L. Roudil and J.-L. Vernet (eds), *Premières communautés paysannes en Méditerranée occidentale: actes du colloque international*, 387-94. Paris: CNRS.

Cremonesi, G. 1965. Il villaggio di Ripoli alla luce dei recenti scavi. *Rivista di Scienze Preistoriche* 20, 85-155.

Darvill, T. and Thomas, J. 2001. Neolithic enclosures in northwest Europe: some recent trends. In T. Darvill and J. Thomas (eds), *Neolithic enclosures in northwest Europe*, 1-23. Oxford: Oxbow.

Degasperi, N., Ferrari, A. and Steffè, G. 1996. *L'insediamento Neolitico di Fornace Gattelli a Lugo di Romagna*. Fosignano: Grafiche Morandi.

Degasperi, N., Mottes, E. and Rottoli, M. 2006. Recenti indagini nel sito Neolitico de La Vela di Trento. In A. Pessina and P. Visentini (eds), *Preistoria dell'Italia settentrionale. Studi in ricordo di Bernardino Bagolini. Atti del convegno*, 143-68. Udine: Museo Friulano di Storia Naturale.

De Juliis, E.M. 1972. Scavo di una capanna preistorica in località 'Casone' (San Severo, Foggia). *Rivista di Scienze Preistoriche* 27, 117-44.

Delano-Smith, C. 1987. The Neolithic environment of the Tavoliere. In G.D.B. Jones (ed.), *Apulia, volume I: Neolithic settlement in the Tavoliere*, 1-26. London: Society of Antiquaries of London.

Denston, C.B. 1987. The skeletal material from Fonteviva. In G.D.B. Jones (ed.), *Apulia, volume I: Neolithic settlement in the Tavoliere*, 207-10. London: Society of Antiquaries of London.

Geniola, A. 1987. Stratigrafia comparata delle grotte cultuali di S. Barbara (Polignano a Mare) e di Cala Colombo e Cala Scizzo (Torre a Mare, Bari). In A. Revedin (ed.), *Atti della XXV Riunione Scientifica dell'IIPP: preistoria e protostoria della Puglia centrale*, 279-95. Firenze: Istituto Italiano di Preistoria e Protostoria.

Guilaine, J. and Cremonesi, G. 1987. L'habitat Néolithique de Trasano (Matera, Basilicate): premiers résultats. In A. Revedin (ed.), Atti della XXVI Riunione

Scientifica dell'IIPP. Il Neolitico in Italia. Volume II, 707-19. Firenze: Istituto Italiano di Preistoria e Protostoria.

Guilaine, J., Simone, L., Thommeret, J. and Thommeret, Y. 1981. Datations C14 pour le Néolithique du Tavoliere (Italie). *Bulletin de la Société Préhistorique Française* 78, 154-60.

Hamilton, S. and Whitehouse, R. 2006. Phenomenology in practice: towards a methodology for a 'subjective approach'. *European Journal of Archaeology* 9, 31-71.

Hedges, R.E.M., Housley, R., Law, I.A. and Bronk, C.R. 1989. Radiocarbon dates from the Oxford AMS system: Archaeometry datelist 9. *Archaeometry* 31, 207-34.

Ingravallo, E. 1997. 'Sant'Anna (Oria). In E. Ingravallo (ed.), *La passione dell'origine: Giuliano Cremonesi e la ricerca preistorica nel Salento*, 135-56. Lecce: Conte.

Jones, G.D.B. 1987. *Apulia, volume I: Neolithic settlement in the Tavoliere*. London: Society of Antiquaries of London.

La Rosa, V. 1987. Un nuovo insediamento Neolitico a Serra del Palco di Milena (CL). In A. Revedin (ed.), *Atti della XXVI Riunione Scientifica dell'IIPP. Il Neolitico in Italia. Volume II*, 801-8. Firenze: Istituto Italiano di Preistoria e Protostoria.

Lo Porto, F.G. 1998. I villaggi preistorici di Murgia Timone e Murgecchia nel Materano. Roma: Giorgio Bretschneider.

Mallory, J.P. 1984-7. Lagnano da Piede I: an early Neolithic village in the Tavoliere. *Origini* 13, 193-290.

Malone, C. and Stoddart, S. 1992. The Neolithic site of San Marco, Gubbio (Perugia), Umbria: survey and excavation, 1985-7. *Papers of the British School at Rome* 60, 1-69.

Manfredini, A. 1972. Il villaggio trincerato di Monte Aquilone nel quadro del Neolitico dell'Italia meridionale. *Origini* 6, 29-154.

Manfredini, A. 1987. Fontanarosa Uliveto. In S.M. Cassano, A. Cazzella, A. Manfredini and M. Moscoloni (eds), *Coppa Nevigata e il suo territorio: testimonianze archeologiche dal VII al II millennio a.C.*, 81-4. Roma: Edizioni Quasar.

Morter, J. 1990. The excavations at Capo Alfiere: 1987-present. In J. Carter (ed.), *The Chora of Croton: 1983-1989*, 14-28. Austin: University of Texas.

Morter, J. 1999. A 'social' structure and 'social structure'. In R.H. Tykot, J. Morter and J. Robb (eds), *Social dynamics of the prehistoric central Mediterranean*, 83-96. London: Accordia Research Institute.

Orsi, P. 1890. Stazione Neolitica di Stentinello (Siracusa). *Bullettino di Paletnologia Italiana* 16, 177-200.

Orsi, P. 1921. Megara Hyblaea 1917-1921. Villaggio Neolitico e tempio greco arcaico, e di taluni singolarissimi vasi di Paternò. *Monumenti Antichi* 27, 109-50.

Patroni, G. 1898. Un villaggio siculo presso Matera nell'antica Puglia. *Monumenti Antichi* 8, 417-520.

Radina, F. 2002. Le ricerche archeologiche nell'insediamento Neolitico del Pulo di Molfetta. In F. Radina (ed.), *La preistoria della Puglia: paesaggi, uomini e tradizioni di 8,000 anni fa*, 101-12. Bari: Mario Adda.

Rellini, U. 1925. Matera: scavi preistorici a Serra d'Alto. Notizie degli Scavi di Antichità 50, 257-95.

Rellini, U. 1929. Nuove osservazioni sull'età Eneolitica ed Enea nel territorio di Matera. *Atti e Memorie della Società Magna Grecia* 1929, 129-47.

Ridola, D. 1926. Le grande trincee preistoriche di Matera. *Bullettino di Paletnologia Italiana* 46, 134-74.

Robb, J. 2007. *The early Mediterranean village: agency, material culture, and social change in Neolithic Italy*. Cambridge: Cambridge University Press.

Robb, J., Mallegni, F. and Ronco, D. 1991. New human remains from the southern Italian Neolithic: Ripa Tetta and Latronico. *Rivista di Antropologia* 69, 125-44.

Salvadei, L. and Macchiarelli, R. 1983. Studi antropologici. In S.M. Cassano and A. Manfredini (eds), *Studi sul Neolitico del Tavoliere della Puglia: indagine territoriale in un'area-campione*, 253-68. Oxford: BAR.

Skeates, R. 2000. The social dynamics of enclosure in the Neolithic of the Tavoliere, south-east Italy. *Journal of Mediterranean Archaeology* 13, 155-88.

Skeates, R. 2005. Visual culture and archaeology: art and social life in prehistoric south-east Italy. London: Duckworth.

Tinè, S. 1961. Notizie preliminare su recenti scavi nel villaggio Neolitico di Stentinello. *Archivio Storico Siracusano* 7, 113-7.

Trump, D.H. 1987. Excavations in 1949-63. In G.D.B. Jones (ed.), *Apulia, volume I: Neolithic settlement in the Tavoliere*, 117-36. London: Society of Antiquaries of London.

Venturo, D. 1996. Rassegna archeologica. Altamura: Rivista Storica 37, 247-64.

Captions for illustrations

Figure 1. Map of key places and regions mentioned in the text.

Figure 2. Aerial photograph of Neolithic enclosure ditches at Masseria Palmori on the Tavoliere Plain, northern Puglia (supplied by Roberto Goffredo and reproduced with the kind permission of the Archive of the University of Foggia).

Figure 3. The 'Manfredi hypogeum' dug into the side of a later Neolithic enclosure ditch at Santa Barbara near Polignano a Mare, central Puglia (after Geniola 1987).

Figure 4. Reconstruction drawing of an enclosure, formed by a palisade, wall and ditch, at Lugo di Romagna near Ravenna, Emilia-Romagna (after Degasperi *et al.* 1996).