THE ARCHAEOLOGY OF DRY-STONE WALLS IN RURAL CONTEXTS

Paul Arthur*

* Università del Salento - Lecce, Italia; paul.arthur@unisalento.it.

Abstract

This paper, originally penned in 2007, is a brief examination of the archaeology of dry-stone walls in southern Apulia. It was conceived with the aim of providing a synthesis to the study of an important category of archaeological remains that characterise a large part of southern Italy and contain much information on the history of the landscape and social and economic development, but which risk being neglected and even destroyed.

Questo articolo, scritto originariamente nel 2007, è una breve disamina dell'archeologia dei muretti a secco rurali nella Puglia meridionale. È stato concepito con l'obiettivo di fornire una sintesi allo studio di un'importante categoria di resti archeologici che caratterizzano gran parte dell'Italia meridionale e che contengono molte informazioni sulla storia del paesaggio e sullo sviluppo sociale ed economico, ma che rischiano di essere trascurati e persino distrutti.

Keywords

Field walls, landscapes, Apulia.

Muri di campo, paesaggi, Puglia.

Introduction

As I am presenting these brief thoughts to the memory of Cosimo 'Mimmo' Pagliara, I would note that, on November 28th 2018, UNESCO added Italian and other dry-stone walls to the list of the world's intangible heritage of humanity, recognising the technique that dates back to prehistoric times as being «indicative of the harmonious relationship between humans and the natural world». Mimmo Pagliara was very aware of this. He had a lively and inquisitive mind, as well as a passionate and well-informed love of his homeland, both natural and anthropic, in southern Apulia. We might say that he possessed a feel of his own origins or, indeed, a marked 'sense of place' that surpassed history and archaeological remains, so as to equally embrace the landscape, the fauna and flora, the winds and the tides, in a holistic view of its ecology. I spent hours with him (although never enough) discussing the common drystone architecture that characterises the land, from field walls to artificial hillocks (specchie), from menhirs to dolmens, as well as the myriad

Dry-Stone Walls in Apulia

The Apulian countryside, as much of southern Italy and the Mediterranean, is characterised by dry-stone walls and other dry-stone features of various date and function – the area is, essentially, a landscape or palimpsest in stone. All these works have a story to tell, although they require adequate analytical methods and interpretative models so as to place them in their correct cultural and historical contexts¹. Most of all, they should not be seen as single artefacts, but as part of a larger territorial and ecological complex.

Walls, whatever their construct and nature, are generally boundaries and most dry-stone walls both enclose and shape fields and properties, and sometimes even political entities, and often

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other ancient or medieval stone constructions and cuttings (including below grounds channels), as well as trackways that scarred the bedrock, almost always of difficult interpretation, but nonetheless an overriding feature of the landscape of southern Apulia.

^{*} This paper was originally presented to the conference organised by Anna Trono at Poggiardo, Lecce, on 'Dry Stone Routes' (30 November-1 December 2007), which is unlikely to be published. I thank Anna for permission to publish a slightly modified version here. Original research was

conducted together with Brunella Bruno and students of the University of Salento.

 $^{^{\}rm 1}$ See, for instance, Buhagiar 2016, for Malta, or Loi 2017, for Sardegna.

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remain their most tangible remains. Their analysis helps largely to shed light on the field systems themselves and thus on the management of the countryside, conditioned by the dominating social and economic structure². Through the study of such walls, we can attempt to define fields, terraces and properties and how they changed through time, along with changes in land-use and social behaviour. It should be remembered, however, that stone walls are not the only form of boundaries that existed, which could have been created by ditches, banks, hedgerows, fences, tracks and roads, as well as by abstract alignments between given points or deviations in the landscape (fig. 1). Ideological boundaries may be part of the awareness of the individual, who knew that something changed 'over the next hill', or 'beyond the road'. Nonetheless, in such stony limestone areas such as is much of Apulia, drystone walls were almost certainly the most frequent form of boundary in historic times, gradually shaping the modern landscape.



Fig. 1: Roman field boundary at Bullock Down, Sussex. Excavations 1976 (Photo P. Arthur).

As material remains of the past, archaeology is one of the most efficient human sciences with which to study them. Work in various parts of Europe has demonstrated their great potential in assessing past social and economic systems. One need only cite the fascinating story of Roystone Grange in Derbyshire, England, woven together by Richard Hodges³, who recounts the conversion of the area over a space of more than 2.000 years from an open landscape, through a Romano-British farmstead, to a series of enclosures (fig. 2). More recently, the study of extra-mural tracks and

terrace walls at Kastro Apalirou on the island of Naxos has been used to elucidate the economy of the Byzantine hilltop settlement⁴.

The last few years have witnessed preliminary steps in the archaeology of Apulian dry-stone walls, and first results are quite encouraging, to say the least. On the downside, however, they have often been presumed to date to quite recent times and, as such a common feature of the landscape, their presence is often taken for granted. Unlike other monuments, their destruction has thus, until recently, occasioned little criticism. In effect, this means that entire sections of our history have been quite recklessly removed, making it all the more difficult to comprehend land management through the ages. Quite apart from strict historical considerations, the criss-crossing of stone walls in the relatively flat southern Apulian countryside is such a regular and traditional feature of the land, that it now helps to give it its own rustic charm and character. The destruction of such typical elements of the landscape contributes to the destruction of the countryside's appeal and the removal of a strong element that, together with features such as the limestone outcrops, the Mediterranean red earth or terra rossa, and olive groves, help to create a sense of place.

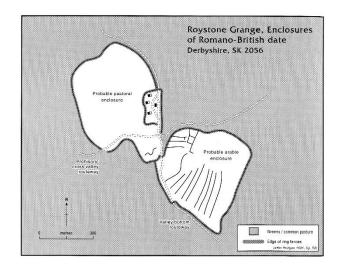


Fig. 2: Royston Grange Roman farmstead with associated enclosures (from Hodges 1991).

It is with these considerations in mind that we began preliminary studies of dry-stone walls in the 1990's and, in 2005, helped set up a project on medieval agrarian landscapes, coordinated by Giovanni Stranieri, that led to the collaboration

² Cfr. for an early analysis Bowen 1961.

³ Hodges 1991.

⁴ Hill, Ødegård 2018.

between the University of Salento (Laboratories for Medieval Archaeology and Archaeobotany), the University of Lyon (Centre for Medieval Archaeology: CIHAM – UMR 5648/ CNRS), and the Soprintendenza per i Beni archeologici della Puglia⁵. Furthermore, the Laboratory for Medieval Archaeology has created a GIS of the southern Apulian landscape (provinces of Brindisi, Lecce and Taranto) in the Middle Ages, with a series of themes, including landscape boundaries⁶.

Despite prevailing views, there is no reason to think that some of the dry-stone walls in the Salento may not even date back to late prehistory, although this still needs to be securely established. Whatever the case, it seems highly likely that some examples date to Messapian (Iron Age) times and others to the period of Roman Republican colonisation, if not in their fabric and form, at least in their alignment. As regards Roman landscaping, analyses of land boundaries and centuriation have demonstrated the correspondence between some tracts of dry-stone walls, centurial axes and modern municipal boundaries. This may be seen very clearly, for instance, in the political boundary between the modern administrative districts of the towns of Soleto and Corigliano d'Otranto (figs. 3-4).

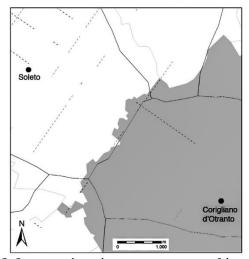


Fig. 3: Correspondence between some tracts of dry-stone walls, centurial axes and modern municipal boundaries between the modern administrative districts of Soleto and Corigliano d'Otranto (Laboratorio di Archeologia Medievale, Università del Salento).

The straight wall that may still be observed to run fairly faithfully along the municipal boundaries is characterised by a series of very large subtriangular boulders embedded in the ground and, apparently, regularly distanced from each other, with an infilling of smaller irregular stones. It is possible that the boulders were originally positioned as markers during the construction of the wall so as to guarantee a straight demarcation line between two field plots. This is a case where carefully placed excavation may help to reveal the date of the wall, which original fabric could well be of Roman origin. Indeed, a Roman field wall has apparently been identified by Thierry van Compernolle as a centurial demarcation in the hinterland of the ancient Messapian and Roman town of Soletum (mod. Soleto). Another possible example of a centuriation wall (also a current administrative boundary between Palmariggi and Giuggianello), appears to divide a sub-rectangular field into two. Clearly the original field is earlier than the boundary wall and thus may even date to pre-Roman times. Undoubtedly, further examples will come to light, although whether all the walls examined by Rita Compatangelo⁷ are really of Roman date and linked to centuriation remains to be seen.



Fig. 4: Dry-stone wall (Roman centuriation boundary?) between the modern administrative districts of Soleto and Corigliano d'Otranto (Laboratorio di Archeologia Medievale, Università del Salento).

There is no evidence to suggest that medieval field boundaries had the regularity of those witnessed in Roman times unless, of course, they were influenced by the Roman land divisions. Indeed, during the early centuries of the Middle Ages, it is possible that field walls were rarely constructed. However, the relatively simple expedient of dry-stone building appears to have continued, even if sporadically, during the

⁵ Cfr. Stranieri 2000; 2009.

⁶ Cfr. Arthur, Gravili 2006; Gravili 2007.

⁷ Compatangelo 1989.

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Byzantine occupation of the Salento. Excavations at Supersano have yielded a length of drystone wall that may have enclosed an agricultural settlement⁸. Although not much of the wall appears to have survived, associated ceramics suggest that it dates to around the eighth century.

Similarly, excavations by Giovanni Stranieri of the renowned Limitone dei Greci near Sava (figs. 5-6), composed partly of a very large dry-stone wall running for about 700m, has now permitted dating through C14 analysis of associated organic remains to between 670 and 880 A.D. (95.4% prob.)⁹.



Fig. 5: The Limitone dei Greci (Photo G. Stranieri).

The construction, certainly added to over the centuries with the addition of field stone, is some 4m wide and still stands to a height of between 1 and 3m. On its eastern side it includes a number of simple shelters and a number of steps, all of which are built in roughly worked limestone masonry keyed into the wall, which suggests that it was managed or defended from the east. Ascertained its general date, its function is still to be properly understood. The radiocarbon results lie to either side of the year 758, when the Adriatic port-town of Otranto was recovered by Byzantine forces,

after a very brief occupation by the Lombards¹⁰. It may thus be suggested that it was intended to control movement from the north and west where. after that date, the Lombards held sway, although further controlled excavation is necessary to prove or disprove the point. Large stone boundary or defensive walls in other parts of the Mediterranean are not totally unknown in early Byzantine times¹¹, whilst large earthwork boundaries exist elsewhere, such as Offa's dyke, that separated Mercia from what were to become the Welsh Marches, of which a section has recently been 14C dated to 430-652, or the eighth-century Danevirke in Jutland. The Limitone dei Greci is also certainly not the only ancient massive dry-stone wall known in Apulia, as others have been indicated by Cosimo D'Angela¹².



Fig. 6: The Limitone dei Greci (Photo G. Stranieri).

However, it is the only one that has been, albeit very partially, excavated by modern standards, with dating corroborated through C14.

Indeed, apart from the wall at Sava, the only other field-wall in the Salento that has been examined through excavation, as far as I am aware, is a small example that surrounds the site of the deserted medieval village of *Quattor Macinarum*, in the municipality of Giuggianello.

The village was the subject of an archaeological project between 1991 and 1996¹³. Excavation across the wall was taken down to the limestone bedrock and showed how it had been built over destruction deposits relating to the village (fig. 7), abandoned by the end of the 15th century and later subjected to spoliation for the later farmhouse or *masseria*. Brown glazed pottery fragments from

⁸ Arthur et Al. 2008.

⁹ Grasso et Al. 2012.

¹⁰ Brown 1992.

¹¹ Zanini 1998, 279-283.

¹² D'Angela 1977.

¹³ See Arthur *et Al*. 1996.

beneath the wall suggested that it had probably been constructed around the 18th century to enclosure a property relating to the nearby postmedieval farmhouse known as Masseria Quattro Macine. Oral testimony suggests that, before it had been converted into an olive grove, the enclosed land contained a thicket or small patch of woodland that had perhaps been left to grow over the ruins of the village, which must have rendered the land uncultivable in the early years of the village's abandonment. Indeed, the wall itself, repaired over the years and looking somewhat heterogeneous, contained some stone blocks, including fragments of late medieval tombstones, which were gathered from the ruins of the village. Wall repair and collapse, together with the addition of stones from land clearance, can make an originally straight or regular wall appear quite careless. Of course, such can be no indication of absolute or relative date, which needs to be ascertained through stratigraphical analysis.



Fig. 7: Excavation across a field wall at Quattro Macine, Giuggianello (Photo P. Arthur).

Perhaps the greatest number of dry-stone field walls indeed date to post-medieval times, to periods of field enclosure related to the advent of cash-crops, particularly olives, for which Salento became particularly renowned from the 16th century onwards, when local olive oil was exported far and wide from ports such as Gallipoli. The 15th and 16th centuries represent the period that witnessed the desertion of a number of medieval villages and the concentration of the agricultural labour force in newly-planned villages or *terrae*, that were to develop into the agro-towns of modern Apulia¹⁴. Less productive areas, grazing

land and wheat fields appear to be less subject to enclosure, and are typified by a reduced quantity of nucleated settlement. Some of these later walls are recognisable by their careful battered construction, wider at the base and narrowing towards the top, crowned by capstones. Nonetheless, such careful construction seems to be related prevalently to land surrounding *masserie*, the farm complexes typical of post-medieval southern Italy¹⁵ that, like the field-walls themselves, are direly in need of archaeological investigation.

Dry-stone walls are still occasionally being built, although are now often intended for embellishment of properties, following a thankfully brief period, during the second half of the twentieth century, when some field boundaries were simply erected in concrete or even in wire. However, they many have also been destroyed, particularly through recent road works, constructions and the opening-up of fields.

Conclusions

Thus, with an apparent history of well over 2.000, if not over 3.000, years, it is clear that their understanding can contribute significantly to the story of the territory, as they contributed to its physiognomy and provide fixed and meaningful points in the landscape down to this day. As hardly any ancient and medieval dry-stone walls have yet been clearly dated or interpreted, it is clearly impossible to judge their significance in the history of landscape and property development. They call for systematic identification, which needs to be based on interdisciplinary programmes document analysis, landscape and toponomastic survey, planning, archaeological excavation and radiocarbon dating. The same goes for a whole host of dry-stone constructions (and earthworks), from dolmens and menhirs, to trulli and pagliare (dry-stone huts and refuges), which still so strongly typify the Apulian countryside. Only in this manner can we even hope to build up a typology of construction types, as has been done elsewhere, with varying degrees of success, and let them take their due place in the tale of Apulian landscape history.

N.B. This paper was written in 2007 and has undergone minor revision in 2018 and 2024.

 $^{^{14}}$ See, for instance, the case of Muro Leccese: Arthur, Bruno 2007

¹⁵ Costantini 1995.

BIBLIOGRAFIA

Arthur P. 2004, I menhir del Salento, in G. Bertelli (ed.), Puglia Preromanica, Milano, 289-291.

Arthur P., Albarella U., Bruno B., King S. 1996, 'Masseria Quattro Macine' a deserted medieval village and its territory in Southern Apulia: An interim report on field survey, excavation and document analysis, in BSR, 64, 181-237.

Arthur P., Bruno B. 2007, Alla scoperta di una Terra Medievale, Muro Leccese, Galatina.

Arthur P., Fiorentino G., Leo Imperiale M. 2008, *L'insediamento in Loc. Scorpo (Supersano, LE) nel VII-VIII secolo. La scoperta di un paesaggio di età medievale*, in *AMediev* 35, 365-380.

Arthur P., Gravili G. 2006, *Approcci all'analisi degli insediamenti e loro confini territoriali nel medioevo*, in *Atti del IV Congresso Nazionale di Archeologia Medievale*, Florence, 31-36.

Bowen H.C. 1961, *Ancient Fields. A tentative analysis of vanishing earthworks and landscapes*, London (publication of the Research Committee on Ancient Fields).

Brown T.S. 1992, *Otranto in medieval history*, in D. Michaelides, D. Wilkinson (edd.), *Excavations at Otranto, volume I: The Excavation*, Galatina, 25-39.

Buhagiar K. 2016, Malta and Water (AD 900 to 1900). Irrigating a semi-arid landscape, BARIntSer 2829, Oxford.

Compatangelo R. 1989, *Un cadastre de pierre. Le Salento romain: paysage et structures agraires*, Lille.

Costantini A. 1995, Le Masserie del Salento, Galatina.

D'Angela C. 1977, Questioni vecchie e nuove sul 'limes' bizantino del Salento, in Cenacolo 7, 7-17.

Grasso A.M., Fiorentino G., Stranieri G. 2012, *Brick in the wall: an archaeobotanical approach to the analysis of dry stone structures (Puglia – Italy)*, in *Saguntum*, Papeles del Laboratorio de Aequeologià de Valencia extra-13, Facultat de Geografia I Història. Departament de Prehistòria i d'Arqueologia. Wood and charcoal evidence for human and natural history, 209-216.

Gravili G. 2007, *Un sistema per l'analisi del paesaggio medievale*, in S. Patitucci Uggeri (ed.), *Archeologia del Paesaggio Medievale*, Quaderni di Archeologia Medievale 9, Firenze, 337-346.

Hill D., Ødegård K. 2018, Extra-mural structures and paths at Kastro Apalirou, in J. Crow, D. Hill (edd.), Naxos and the Byzantine Aegean: Insular Responses to Regional Change, Papers and monographs from the Norwegian Institute at Athens 7, 137-144.

Hodges R. 1991, Wall-to-Wall History. The Story of Roystone Grange, London.

Loi C. 2017, Pressoi litici in Sardegna tra Preistoria e Tarda Antichità, Scienze e Lettere, Rome.

Stranieri G. 2000, Un limes bizantino nel Salento? La frontiera bizantino-longobarda nella Puglia meridionale. Realtà e mito del 'Limitone dei Greci', in AMediev 27, 333-355.

Stranieri G. 2009, Per un approccio geoarcheologico alle delimitazioni in pietra a secco della Puglia centromeridionale, in G. Volpe, P. Favia (edd.), Atti del V Congresso Nazionale di Archeologia Medievale, Società degli Archeologi Medievisti Italiani (SAMI), Foggia-Manfredonia 30 settembre - 3 ottobre 2009, Florence, 95-100.

Zanini E. 1998. Le Italie Bizantine. Territorio, insediamenti ed economia nella provincia bizantina d'Italia (VI-VIII secolo), Bari