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'SARSEN STONES IN WESSEX': A SOCIETY OF ANTIQUARIES PROJECT CONTEXTUALISED AND RENEWED

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This paper reviews the Society of Antiquaries' Evolution of the Landscape project, which started in 1974, and the project's Sarsen Stones in Wessex survey. The survey was an ambitious public archaeology undertaking, involving c 100 volunteers led by Fellows of the Society during the 1970s. Its aims, objectives and outcomes are described in this article. The survey's unique dataset, produced for the counties of Wiltshire, Hampshire and Dorset, has now been digitised. Drawing on the dataset, the paper situates the Evolution of the Landscape project in the context of later twentieth-century British archaeology. It demonstrates the importance not only of individual Fellows, but also contemporary movements in academic and development-led archaeology, to the direction of the Society's activities in this formative period for the discipline today, and shows how the Society's research was engaged with some of archaeology's most pressing cultural resource management issues.

Keywords: landscape archaeology; palimpsest; sarsen; GIS; Wessex; Neolithic; agriculture

INTRODUCTION

> [It] might be useful to suggest a particular task which could be easily defined and probably achieved within a year. This was a search for the present and former location of sarsen stones.[1]

Those Fellows of the Society of Antiquaries and their guests, who gathered on 23 February 1974 to inaugurate the 'Evolution of the Landscape' project, trod in the footsteps of eminent men including Mantell, Prestwich, Rupert Jones and Smith.[2] In asking themselves 'what was the incidence of sarsen stone in prehistory?' (in particular, in the Neolithic), they situated themselves in a tradition of enquiry concerning the geological origins, distribution and uses of southern Britain's sarsen stones. Since the expansion of this research in the nineteenth century, aspects of geological, archaeological and ethnohistorical research into sarsen have often overlapped.

Sarsen is a silcrete sandstone (fig 1). Discontinuously distributed across central-southern and eastern England as cobbles and boulders, sarsen was formed by the cementation of material in Tertiary sand and pebble beds by silica-rich groundwater or in

1. HEA, SOA03/01, Evolution of the Landscape, Wessex Pilot Scheme News Sheet No. 1.
2. Mantell 1833; Prestwich 1854; Smith 1884; Rupert Jones 1886.

Fig 1. The Valley of Stones, Marlborough Downs (Wiltshire) has one of England's few remaining large sarsen spreads. It is reputed to resemble the chalk upland before prehistoric and more recent clearance, commonly for agricultural purposes, removed stones from their natural positions. Despite the historical quarrying industry, there are estimated to be more than 10,000 sarsens lying in this dry chalk coombe (Small *et al* 1970). *Photograph*: the author.

drainage-line or pan/lacustrine settings. Whilst the processes of silica deposition in the host sediments were varied and occurred at different times, indurate sarsen stones are accessible on the present-day land surface (for example, in south-west Dorset) or buried in superficial deposits (such as over south Buckinghamshire's Chiltern Hills).[3] Best known for its use in megalithic structures from Wiltshire to Kent, sarsen nevertheless can be seen in buildings of varying date, purpose and status (fig 2) across its distribution.

Since the Evolution of the Landscape project's sarsen survey in the 1970s, archaeologists have largely been concerned with megalithic monuments built with this type of stone. There has been limited focus on the sarsen material itself, with some exceptions led most notably by researchers working in and around Avebury (Wiltshire).[4] Contributing at a regional scale to an understanding of sarsen distribution in relation to prehistoric archaeology, the potential of the 'Sarsen Stones in Wessex' survey was never fully met by its

3. Small *et al* 1970; Summerfield and Goudie 1980; Ullyot *et al* 2004; Nash and McLaren 2007; Ullyot and Nash 2016.
4. See in particular Gillings and Pollard 1999, 2004 and 2016a; Gillings *et al* 2008; Pollard and Gillings 2009, 2010.

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Fig 2. Sarsen in the walls of St Peter's church, Broad Hinton (Wiltshire), demonstrates the variability both of its use – here as rubble walling rather than cut blocks – and its lithology, with flint pebble clasts amongst the cemented sand in some pieces. *Photograph*: the author.

instigators. This is largely because of problems with its analogue dataset, and also in part due to deficiencies of the Evolution of the Landscape project's theoretical framework, which are discussed below.

This paper contextualises the Sarsen Stones in Wessex survey. It identifies contemporary conceptualisations of landscape as the main influence on the project's treatment of sarsen stone, strongly directed by practitioners of the British field archaeology tradition whose professional interests lay in the project's study area. The Evolution project's Sarsen survey epitomises the development of landscape archaeology in Britain after the Second World War. Whilst the survey's outputs were limited and now are physically compromised, a newly digitised dataset means that the project can play a part in answering recent calls to make a more effective exploration of past sarsen-scapes.[5]

THE 'EVOLUTION OF THE LANDSCAPE' PROJECT

This project was one of two schemes introduced by Fellows H Collin Bowen and Barry Cunliffe in 1973, following suggestions that the Society become proactive in research[6] (the other, the proposed archaeological investigation of churches, was prompted by threats to the Church of England estate from redundancy following the 1968 Pastoral Measure). The Evolution project aimed to evaluate prehistoric population size and socio-economic organisation by researching changing land use. Like the churches proposal, it was also driven by perceived threats to the archaeological resource, which had already led to the creation of *Rescue* (The British Archaeological Trust) in 1971. Both proposals responded

5. Field 2005; Gillings and Pollard 2016a.
6. Barry Cunliffe, pers comm, 26 Feb 2018.

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to the Society's need for an overarching research framework to direct the allocation of its funds to the right grant applications, given these challenges.[7]

The idea of the first human-made landscape was at the heart of the preparations. The purpose of the Evolution project as first proposed was 'to investigate the origins of the first organised landscape in Britain' – in particular, 'the lowest layer in this palimpsest, disclosing the period and the manner in which man first imposed a visible order on his countryside'.[8] As the idea developed during 1972, with additional input from John Coles, the emphasis fell on 'the emerging possibility of recovering the earliest patterns of regular land allotment'.[9] Throughout, the emphasis was on a project that would apply geographical and archaeological precepts to 'break away from the single site and single period approach'.[10]

The promoters of the Evolution project had already identified the Somerset Levels and Wessex as possible study areas. Wessex was suggested because of its extensive, well-preserved, archaeological evidence for prehistoric land use, including earthwork field systems with stratigraphic relationships.[11] By the time the extended proposal was written, the overarching aim had become an understanding of 'the size and disposition of the population and the nature of its economic and social organization. In this way, the dynamic processes at work within society may begin to be better appreciated.' Research already underway by, amongst others, local societies, university departments and government agencies, could support the essentially low-budget, collaborative approach espoused by the project's proposers, who called for a working party to be convened. Before a meeting was held, the project had been re-named from 'The Organisation of the Landscape' to 'The Evolution of the Landscape',[12] prefiguring Christopher Taylor's vision for research to illuminate change over deep time.[13]

Collin Bowen then made a separate project proposal to his associates Richard Atkinson, Desmond Bonney, Richard Bradley, Geoffrey Kellaway and Isobel Smith. He proposed recording all the sarsen stones, whether extant or lost, in Hampshire, Wiltshire and Dorset, 'in order that archaeologists can assess the problems of clearance and the range of utilisation in geographical and functional terms from the earliest times'.[14]

By the time of the inaugural 'Evolution of the Landscape, Wessex Pilot Project' meeting, held on 23 February 1974 with about forty invited attendees (unfortunately un-named in the minutes), two distinct methodologies had been identified. Cunliffe presented on the first: an intensive study of a small area of landscape, which he illustrated with reference to work already underway around Danebury. Bowen advocated surveying a far larger area for one class of data, proposing a sarsen stone study. The meeting concluded that both were of interest: the Danebury project would receive financial support; the sarsen survey would commence, using a pre-prepared information sheet and record-card.[15]

7. Bowen and Cunliffe 1973.
8. SAL, MS953/1/1, Proposal for a scheme to investigate the origin of the first organised landscape in Britain.
9. SAL, MS953/1/1, Proposal for sponsorship of a scheme of research by the Society of Antiquaries of London.
10. SAL, MS953/1/1, The Organization of the Landscape – The Creation of the Project
11. Bowen and Cunliffe 1973, 9.
12. SAL, MS953/1/1, letter written by F H Thompson dated 9 Aug 1972.
13. Taylor 1974, 151.
14. HEA, SOA03/18, memorandum written by Collin Bowen dated 20 Dec 1973.
15. HEA, SOA03/01, Evolution of the Landscape, Wessex Pilot Scheme News Sheet No. 1.

Volunteers led by Collin Bowen and Isobel Smith carried out the sarsen survey between 1974 and 1976, outlined below. The results were published in *The Antiquaries Journal* in 1977. Looking like an interim report, that paper was, in fact, the survey directors' only intended written output. Cunliffe's work at Danebury expanded into the 'Danebury Environs Project'.[16] The aspiration of the Evolution of the Landscape project to be the focal point for ongoing research into the transformation of the countryside from wilderness to an organised and divided agricultural landscape was, however, not realised. John Evans' 'Wessex Linear Ditches' fieldwork[17] and John Bailey's 'Parish Boundaries' project in Dorset[18] were supported financially by the Society of Antiquaries under the Evolution aegis, as was Martin Bell's 'Dry Valley' project.[19] But Collin Bowen withdrew from further involvement in late 1978 in anticipation of his retirement.[20]

THE 'SARSEN STONES IN WESSEX' SURVEY

Aims and objectives

Intended to be the pilot scheme of the Evolution project, Collin Bowen proposed that a sarsen survey 'could be done by dividing the area between individuals and groups who would undertake to look everywhere within their individual pieces of jig-saw'. He advocated a project engaging volunteers, because they could complete work that for one person might take '24 man years'.[21] Three project aims were articulated: to establish the former incidence of sarsen stone in the study area; to describe how sarsens had been dealt with (as a useful mineral resource or as impediments to land use); and to understand the effect of sarsen stones on underlying chalk bedrock.

The methodology was outlined in the project's 'Information Sheet No. 1'. Volunteer participants would make a thorough search of Wiltshire, Dorset and Hampshire, annotating 1:25,000-scale Ordnance Survey maps with the positions of sarsen stones. They were to record details of each stone or group of stones on pro-forma sheets called 'Tally Cards' (fig 3). At the end of the project the maps and sheets would be archived and a collated list of all the stones published. Certain sarsens would be excavated to investigate their relationship with bedrock, aiming to shed light, as Bowen put it, on 'the hollows that occasionally puzzle excavators'.[22] Finally, a paper was to be published drawing the project's conclusions. The initial results were reviewed in May 1975. At that time, fieldwork in Dorset was 'substantially complete'[23] and continuing in Hampshire and Wiltshire. By 1977 it was almost finished, with acknowledged gaps in north-east Hampshire and in the militarily restricted Salisbury Plain Training Area.

The project leaders had, or came to develop, additional objectives not mentioned in either 'Information Sheet No. 1' as circulated to the volunteers in 1974, or in the final

16. Cunliffe 2000.
17. SAL, MS953/1/1, report written by John Evans dated 29 Nov 1977.
18. SAL, MS953/1/1, letters written by John Bailey dated 20 Mar 1978, 29 Oct 1981 and 11 Apr 1983.
19. Bell 1983.
20. SAL, MS953/1/1, letter written by Collin Bowen dated 6 Dec 1978.
21. HEA, SOA03/01, Evolution of the Landscape, Wessex Pilot Scheme News Sheet No. 1.
22. HEA, SOA03/03, Sarsen Symposium, Evolution of the Landscape Project News Sheet No. 2.
23. Bowen and Smith 1977, 185.

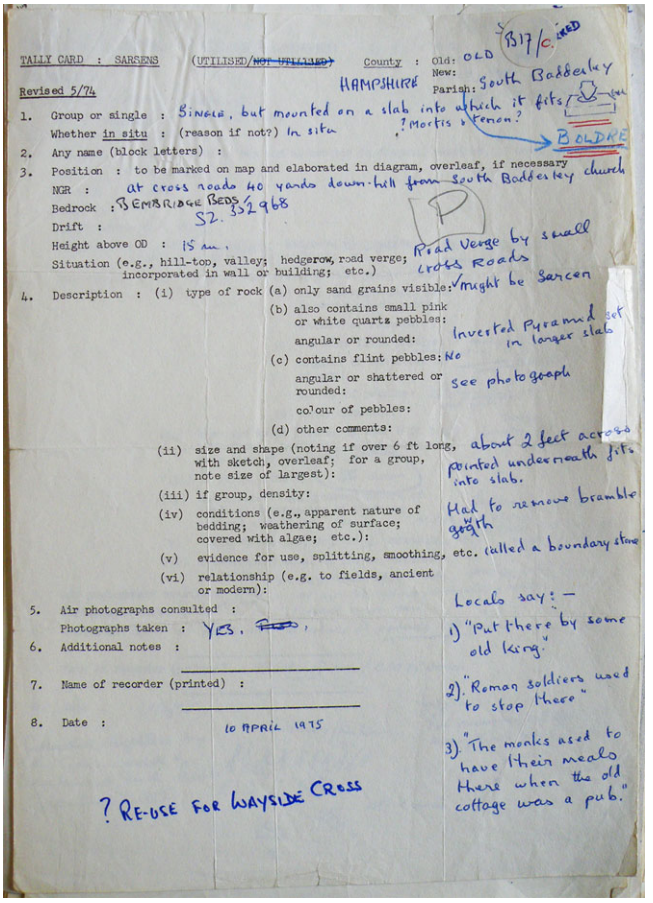
TALLY CARD : SARSENS (UTILISED/~~NOT UTILISED~~) County : Old: OLD
New:
Revised 5/74 HAMPSHIRE Parish: South Bedderley
1. Group or single : Single, but mounted on a slab into which it fits
Whether in situ : (reason if not?) In situ ?Mortis & Tenon?
2. Any name (block letters) :
3. Position : to be marked on map and elaborated in diagram, overleaf, if necessary
NGR : at cross roads 40 yards down-hill from South Bedderley church
Bedrock : Cambridge Beds SZ 532968
Drift :
Height above OD : 15 m.
Situation (e.g., hill-top, valley; hedgerow, road verge; incorporated in wall or building; etc.) Road Verge by small Cross Roads
4. Description : (i) type of rock (a) only sand grains visible: ✓ might be Sarcen
(b) also contains small pink or white quartz pebbles:
angular or rounded: Inverted Pyramid set in longer slab
(c) contains flint pebbles: No
angular or shattered or rounded: see photograph
colour of pebbles:
(d) other comments:
(ii) size and shape (noting if over 6 ft long, with sketch, overleaf; for a group, note size of largest): about 2 feet across pointed underneath fits into slab.
(iii) if group, density:
(iv) conditions (e.g., apparent nature of bedding; weathering of surface; covered with algae; etc.): Had to remove bramble growth
(v) evidence for use, splitting, smoothing, etc. called a boundary stone
(vi) relationship (e.g. to fields, ancient or modern):
5. Air photographs consulted :
Photographs taken : YES. ~~NO~~.
6. Additional notes :
7. Name of recorder (printed) :
8. Date : 10 APRIL 1975
? RE-USE FOR WAYSIDE CROSS
Locals say: —
1) "Put there by some old king."
2) "Roman soldiers used to stop there"
3) "The monks used to have their meals there when the old cottage was a pub."

Fig 3. The Sarsen Stones in Wessex Tally Card for a possible sarsen stone recorded by a volunteer in Boldre (Hampshire), showing the information required by the project. Following the completion of the record, at least five additional notes were made, perhaps at different times and likely by different people, in pencils, black biro, red ink and blue felt-tip pen. SAL, MS953/3/2/1/B17c. Reproduced with the permission of the Society of Antiquaries of London. *Photograph*: the author.

published paper: Bowen had also wanted to identify owners, in order to persuade them of the importance of preserving the stones; to list sarsens on bedrock geology other than chalk; and to note sarsens incorporated into structures outside the generally recognised sarsen locales.[24] By 10 May 1975, when a progress meeting called the 'Sarsen Symposium' was held at Burlington House, Bowen was hopeful that the Wessex project archive would form the nucleus of a national sarsen record.[25] Bowen's manuscript notes recording discussions with Isobel Smith show that they talked about:[26] experimenting with sarsen stone dressing; investigating sarsen's 'case-hardening' effect;[27] and using excavation

24. HEA, SOA03/18, memorandum written by Collin Bowen dated 20 Dec 1973.
25. HEA, SOA03/03, Sarsen Symposium, Evolution of the Landscape Project News Sheet No. 2.
26. HEA, SOA03/16, Sarsens. Notes.
27. See Summerfield and Goudie 1980, 75.

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to find out whether or not sarsens occur naturally in mounds and as upright stones, and to investigate a standing stone. None of these wishes came to fruition, other than in minor ways; for example, the Wiltshire component of the survey includes records of sarsens on south-east Swindon's Greensand.

Outcomes

If considering solely the three main published aims and the field survey carried out by volunteers, the Sarsen survey was successful. The project mapped the presence of sarsen across the three counties, and a large dataset was gathered comprising nearly 900 records. As well as these field survey results, the dataset included a notable collection of published and unpublished references in its Tally Cards, especially for Dorset and Wiltshire, although little reference was made to commentaries on sarsen stone in the relevant British Geological Survey memoirs. If not the absolute former incidence of the stone in a geological sense, the project at least showed the range of sarsen's twentieth-century distribution in three counties in both 'natural' and anthropogenic contexts, hinting at the earlier availability of sarsen as a mineral resource. The project's valuable excavations at two sarsens on the Marlborough Downs demonstrated that one boulder lay directly on the Chalk bedrock, whilst the second, nearby, rested on a thin clay lens over the chalk.[28] A hoped-for comparison with sarsens excavated from Clay-with-flints and sarsens in an uncertainly-prehistoric setting[29] did not go ahead.

The concluding publication was co-authored by the project's leading investigators, Collin Bowen and Isobel Smith. Whilst it came out before the very last of the survey was assembled, the synthesis was felt to offer 'a consistent statement of distribution'[30] of the stone. Bowen and Smith concluded that sarsens had hardly been an obstacle to farming, having been densest in areas of Wiltshire and Dorset that were also densely occupied in prehistory.[31] Within the paper, the principal products included three black and white distribution maps.[32] Despite a note from Paul Ashbee to Collin Bowen mentioning that Ashbee had a 'rough list'[33] of sarsens in Kent, none appear in the published southern England general distribution map. Neither is the presence of sarsen in counties including Berkshire, Surrey or Sussex indicated. Some distribution data provided by Andrew Goudie for eastern England were included. The figures also indicate a few records in Surrey, just over the Hampshire county boundary, whilst records collected by volunteer Peter Gallup after publication could not be included.

The dataset had some significant gaps, including the absence of records of sarsen-built features and natural sarsen spreads from a substantial proportion of map-sheets SU16 and SU17, the area immediately to the south and east of Avebury (Wiltshire). Sarsen there had been deemed to be too prolific for enumeration;[34] it is unclear how points in these unrecorded areas around Avebury were created for the published Wiltshire distribution map. The West Kennet Long Barrow; the stone settings of Avebury henge; the Overton Down

28. Bowen and Smith 1977, 194–5.
29. HEA, SOA03/16, Sarsens. Notes.
30. Bowen and Smith 1977, 186.
31. Ibid, 195.
32. Ibid, 188 fig 1, 190 fig 2 and 192 fig 3.
33. HEA, SOA03/48, letter written by Paul Ashbee dated 14 Oct 1975.
34. SAL, MS953/4/1/SU16, MS953/4/1/SU17.

Table 1. The different record formats used by volunteers in the Sarsen Stones in Wessex survey, with frequency by type and county. The total of 879 includes seven records of areas unsuccessfully searched for sarsens.

COUNTY	Tally Card: sarsens	Tally Card Revised 5/74	Tally Card: sarsen JB	Handmade	Postcards	Other format	TOTAL
Hampshire	6	300	0	5	0	0	**311**
Dorset	41	5	86	0	0	1	**133**
Wiltshire	1	26	0	62	132	214	**435**
TOTAL RECORDS	**48**	**331**	**86**	**67**	**132**	**215**	**879**

axe *polissoir* and the cup-marked sarsen; the 'sarsen villages'; sarsen spreads in Clatford, Lockeridge, Piggledene: none were recorded.

The analysis was beset by a number of issues. Differences between the survey's conduct in the three counties were conceded; for example, the Dorset results were felt to include a detailed record of 'natural' sarsen distribution, whilst Hampshire records focused on utilised sarsens in anthropogenic contexts.[35] This variability, resulting in part from inconsistencies in how records were made in each county and also volunteers' different interpretations of the Tally Card pro-forma, is apparent in the archived datasets.

There were three versions of the project's Tally Card recording forms. These included the original, 'Tally Card: sarsen' (forty-eight records), a later iteration 'Tally Card Revised 5/74' (331 records) and an expanded version made by John Bailey and used only in Dorset, 'Tally Card: sarsen JB' (eighty-six records). In total they account for 53 per cent of all records (table 1). The forms included eight broad categories of data. Each category comprised a number of more-or-less discrete items of information, recorded by the volunteers in a semi-structured way without controlled language or mandatory fields. Information could be written anywhere on the sheet, with sketches and additional information on the reverse (see fig 3). Most Tally Cards were not duplicated from a master document, but typed out when fresh sheets were needed. There are therefore some inconsistencies from sheet to sheet, with categories and questions missed out or placed in a slightly different location on the page. Occasionally a volunteer noticed a missing question and wrote it in themselves; at other times, not. Remaining records were made on handmade versions (sixty-seven records), postcards (132 records) and other formats (215 records) (see table 1).

All bar five of the 311 Hampshire and one of the 133 Dorset records used variants of the project's Tally Cards. In contrast, the bulk of the 435 records for Wiltshire were made on small postcards and typescript notes (see table 1). Capturing very few of the Tally Card data categories, they include many bibliographic references for both extant and long-lost stones. Isobel Smith had made an extensive literature search for the county (30 per cent of Wiltshire records), which neither the Hampshire co-ordinator, Peter Gallup, nor the Dorset co-ordinator, John Bailey, attempted. Only 5 per cent of Hampshire and 7 per cent of Dorset records came from published sources, compared with 77 per cent and 86 per cent respectively from visits (table 2). As well as the locations of sarsens in natural and anthropogenic contexts, the volunteers recorded their theories about what the stones represented, why they were there, local information and folklore. In Hampshire, for example, this

35. Bowen and Smith 1977, 186.

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Table 2. General characteristics of the 872 Sarsen Stones in Wessex records compiled by volunteer recorders, by county. *One Hampshire record is very clearly dated 1973, an obvious error on the part of the recorder, but cannot be re-attributed.

CLASS		Hampshire	Dorset	Wiltshire	TOTAL
'Utilised/not utilised'	**Utilised**	252	41	39	**332**
	Not utilised	51	28	31	**110**
	Not indicated	8	63	359	**430**
NGR	**no NGR**	2	0	49	**51**
	2-figure	0	0	1	**1**
	4-figure	4	1	11	**16**
	6-figure	249	74	110	**433**
	8-figure	54	57	258	**369**
	10-figure	2	0	0	**2**
Recorded names	**Primary recorder**	50	16	19	**85**
	Secondary recorder	5	6	4	**15**
	Unattributed	16	8	294	**318**
Record date	**to day**	74	71	87	**232**
	to month	194	46	9	**249**
	to year	11	0	3	**14**
	unrecorded	32	15	330	**377**
	Year range	1973*–86	1974–5	1974–6	
Data source	**visit**	241	115	249	**605**
	bibliographic	17	9	132	**158**
	own authority	10	1	3	**14**
	pers comm	23	4	11	**38**
	unrecorded	20	3	34	**57**

included identification of sarsens as 'mark stones'[36] and the tale of two thirsty sarsens in Twyford that drink from the river when the church bells ring.[37]

Various issues with the analogue records have longer-term archival implications. There is considerable variation in the visual quality of each record sheet, such as the handwriting, ink, legibility and text placement (see fig 3), as well as in the quality of the recorded content. As part of the original analysis, the records were collated and distribution maps for each county produced at 1:100,000. These showed sarsen locations coded by four general periods and as 'natural' stones, singly and as groups. Regrettably, these archived distribution maps are now compromised as the coloured markers stuck onto the sheets have lost their adhesion and fallen away (fig 4).

Archaeology enjoys a long history of public participation, including fieldwork by volunteers working at a national scale. Projects include, for example, the National Record of Industrial Monuments,[38] the War Memorials Register,[39] the Defence of

36. After Watkins 1925, 23–33.
37. SAL, MS953/3/2/1/T8a.
38. Buchanan 1969, 1971.
39. Catherine Long, pers comm, 3 Aug 2017.

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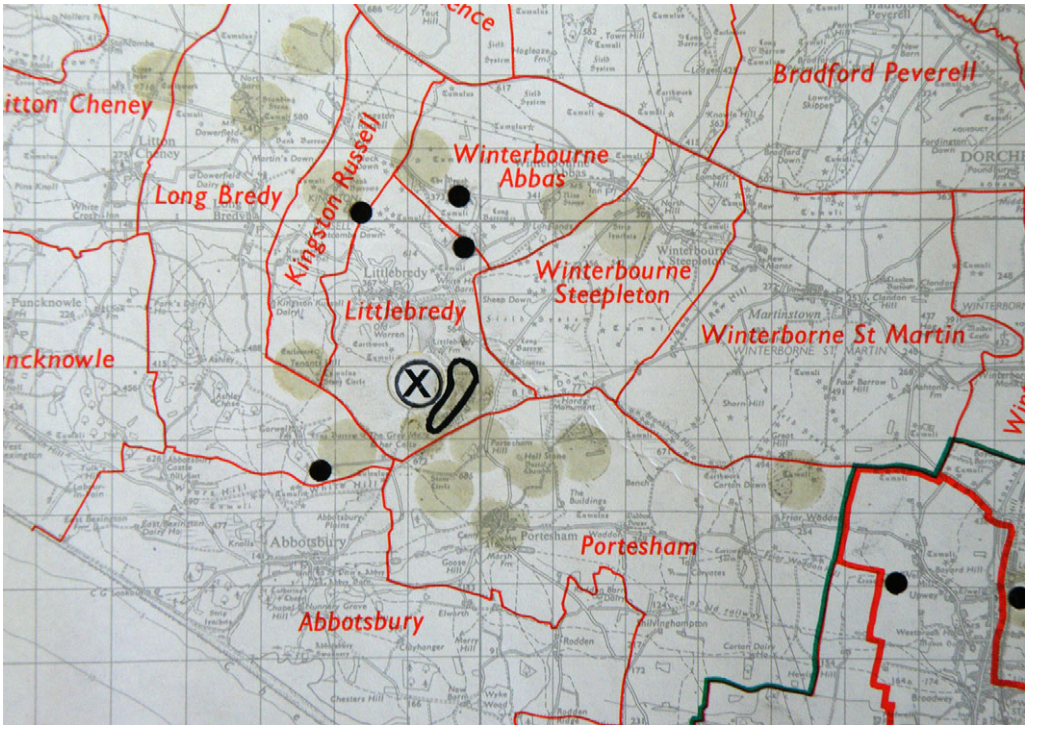

Fig 4. An extract from the Sarsen Stones in Wessex 1:100,000 distribution map for Dorset. Black dots show locations of single sarsen stones attributed to medieval, later and undated uses. The area outlined in black adjacent to the circled cross is the Valley of Stones in Littlebredy parish. Pale circular marks on the map show where coloured stickers once marked locations. The stickers were colour-coded to indicate information including date of use (eg red for prehistoric), or sarsens that were documented in bibliographic sources but no longer present on the ground. SAL, MS953/2/2a-b. Reproduced with the permission of the Society of Antiquaries of London. *Photograph*: the author.

Britain Project[40] and Home Front Legacy.[41] County-wide projects include Leicestershire's Community Heritage Initiative.[42] The sarsen survey's time-limited, regional, subject-specific fieldwork with a prehistoric focus stands out not only as a precursor to present-day collaborative citizen-science, but also for its ambition. It covered a big area and in a short space of time gathered a large dataset, drawing on multiple sources researched by a range of participants.

It is surprising that, despite the project's explicit aim to understand prehistoric relations with sarsen stone, no attempt was made to explore historical clearance of the stone and the undoubted relevance of this activity to interpreting the observable geological and archaeological records. An awareness of the potential to explore the historical industry is shown by a note typed in preparation for the 1975 Sarsen Symposium, tabling a report

40. Council for British Archaeology 2017.
41. Council for British Archaeology 2014.
42. Leicestershire County Council 2009.

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on 'evidence for movement/disappearance *including unfinished splitting etc*'.[43] At the Symposium, Noel King described the industry but dwelt on the Nature Conservancy Council's interests on the Marlborough Downs. It is noticeable that none of the Tally Cards deal with the immense quantities of sarsen street furniture in villages and towns in the study area. The project team could legitimately claim to have created 'a picture of the present distribution of the stones' in the study area, but without any assessment of modern clearance the assurance that the data also show 'their probably maximum incidence on the surface, whether naturally or quarried, within the last 6,000 years'[44] is true only at the smallest of scales at which the project's maps were reproduced.

The data

The sarsen survey records are difficult to use as an analogue dataset and because of their variability. That includes the diversity of non-standardised record formats, absence of controlled recording language and different interpretations by volunteers around what should be recorded, and the heterogeneous nature of the collected data. Additionally, the 1:100,000-scale distribution maps[45] are compromised and cannot be used to replicate or interpret the published mapping. The published figures have their utility but are static, small-scale, black and white illustrations that cannot be interrogated in ways made possible by modern Geographic Information Systems. Accordingly, a digital dataset is required to employ the information contextually, for example with geological or historical base-mapping.

Following an assessment of methodologies used by other archive projects digitising historical datasets, the complex visual properties of the Tally Cards were shown to preclude the use of scanning, computerised handwritten text recognition and data segmentation to create a digital dataset. A process of manual transcription was designed to capture data from the paper sarsen survey records in the Society of Antiquaries of London's collection MS 953 and from microfiche copies of that material held by the Historic England Archive. This exercise resulted in 872 separate records for individual sarsens, groups of sarsens and other features such as sarsen-built monuments. Data were transcribed following specific protocols into a spreadsheet comprising forty-five discrete fields, in which lengthy textual records were managed according to the precedent set by the British Museum's 'Micropasts' National Bronze Implements Index project.[46] The detailed methodology, paradata and transcription protocols are publicly archived alongside an archive report.[47]

Various measures can be used to explore data quality across the total dataset and, bearing in mind differences in how data collection was co-ordinated in each area, between the three counties. This is important in order to judge the weight that may be placed on the archived data. Replicating Bowen and Smith's general distribution map of 'natural' ('not utilised') and anthropogenic ('utilised') sarsens[48] demonstrates the difficulty of interpreting this classification. Figure 5 was produced using the total dataset (because it is not

43. HEA, SOA03/18, Future Sarsen Programme. Note that italics in the text indicate a handwritten addition to the typescript.
44. Bowen and Smith 1977, 186.
45. SAL, MS953/2/2a-b, MS953/3/3/1, MS953/4/3a.
46. Bonnachi *et al* 2015; Jennifer Wexler, pers comms, 13 Aug and 5 Sept 2017.
47. Whitaker 2020a, 2020b, 2020c.
48. Bowen and Smith 1977, 190 fig 2.

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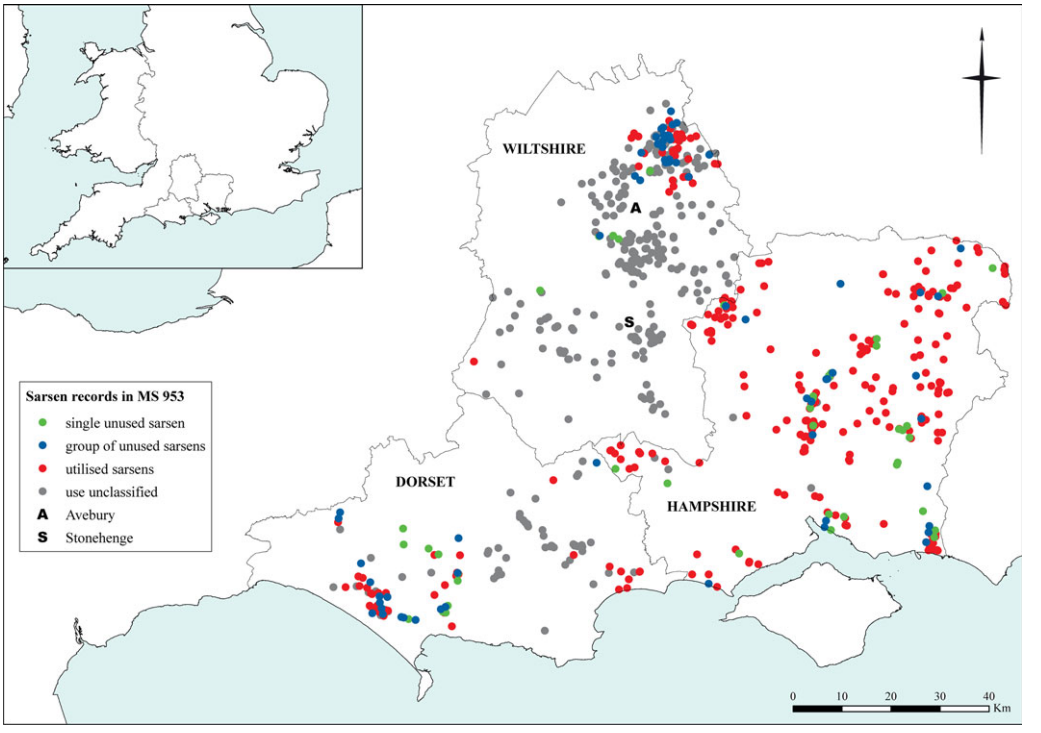

Fig 5. The distribution of all 872 digitised Sarsen Stones in Wessex project records. Bowen and Smith's original map published in 1977 displayed three classes: single natural sarsen; group of natural sarsens; utilised sarsen. Here, single and grouped unused sarsens (Bowen and Smith's 'natural' stones), utilised sarsen and the 430 records unclassed by volunteer recorders are shown. This dataset includes twenty-six records made after 1977 and may include duplicate records in the more complex Wiltshire subset. Includes Ordnance Survey data from 2017. *Map*: the author.

clear how Bowen and Smith selected points for their mapping). Of the 872 records, 332 (38 per cent) were marked as 'utilised', 110 (13 per cent) as 'not utilised'; but in 430 records (49 per cent) this field went unrecorded (see table 2). An exact replica of the original map is thus not possible. Key differences include, for example, the presence in Hampshire of groups of 'not utilised' sarsens, whereas the map published in 1977 shows only single 'natural' stones. The missing records to the east and south of Avebury are clear. Nevertheless, the new version is broadly similar.

The quality of grid-references is another useful measure, assessed in terms of *tolerance* (that is, the percentage of grid-references recorded to 4-, 6-, 8- or 10-figures). Overall, the quality is high. In Hampshire, 303 (97 per cent) of records had 6- or 8-figure grid-references; in Dorset, 131 (99 per cent); in Wiltshire, 368 (86 per cent). Although this measure is not one of *accuracy*, the large proportion of well-referenced records, given field recording without global positioning aids, is highly reassuring. Nearly 70 per cent of all records were the result of a field visit. The project's short timescale is reflected in the data collection date ranges, except for Peter Gallup's continuing research in Hampshire until 1986.[49]

49. HEA, HSS01, Hampshire Sarsen Survey.

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Table 3. The number of records created by the most active volunteers, by county, each volunteer making more than five Sarsen survey records.

HAMPSHIRE		DORSET		WILTSHIRE	
Volunteer	Records	Volunteer	Records	Volunteer	Records
P W G	130 (43%)	N H F	39 (30%)	B P	73 (17%)
M F H	23 (7%)	C J B	35 (27%)	I F S	21 (5%)
D M B	13 (4%)	D Y	15 (11%)	K F	9 (<3%)
F O	11 (4%)	M J	8 (6%)	J B	6 (<2%)
S C	11 (3%)	R A P	7 (5%)		
G H S	9 (<3%)				
J C D	7 (<3%)				
M C	6 (<2%)				
M D	6 (<2%)				
unattributed	16 (5%)		8 (6%)		294 (69%)

Although 377 (43 per cent) of records went undated, it is possible to profile much of the fieldwork to the day or month of the year (481 records, 55 per cent) (see table 2). Characteristics such as these suggest that confidence in the general dataset is warranted.

A feature of many modern digital crowd-sourced projects, such as 'Micropasts', is that a small number of participants create the greatest number of records.[50] A modest evaluation of this aspect of the dataset is possible by recording the survey's volunteer names (table 3). Although 318 (36 per cent) of all records were unattributed, the rest have a named primary recorder and sometimes a second partner (see table 2). Overall, a small number of volunteers did make the most records. In Hampshire, Peter Gallup recruited the biggest team, but made the most records himself (130 records, 43 per cent of Hampshire). John Bailey, who made thirty-five records (27 per cent of Dorset) recruited fewer volunteers there and shared much of the workload with N H Field (39 records, 30 per cent). Wiltshire had a similar number of volunteers as Dorset, but 294 (69 per cent) of the records are unattributed (see table 3). This figure is tied to the use of notes and postcards in Wiltshire. That county's dataset largely lacks the specially designed Tally Cards (see table 1) that included the prompt to record the volunteer's name.

It is also possible to assess the extent to which gaps in the map are due to absence of sarsen, or simply reflect where the volunteers worked. The most prolific volunteers working in Dorset and Hampshire were quite well-spread across those counties (fig 6), prompting more confidence in the survey coverage. In Wiltshire, the overall volume of records across the county is encouraging. Gaps in areas ST92 (south–west Wiltshire, between Shaftesbury and Fovant) and ST93 (west Wiltshire, between Hindon and Wylye) are explicitly explained in two notes confirming that the five volunteers searching there found no sarsens.[51] But the majority of attributable records in Wiltshire were made by Bernard Phillips, working only in the Swindon area (73 records, 17 per cent of Wiltshire) (see table 3). Furthermore, only 249 (58 per cent) of Wiltshire records were derived from field visits (see table 2). This suggests that particular care should be taken to review the Wiltshire data, interrogating the bibliographic sources that were so heavily used and characterising

50. For example, Holley 2010; Causer and Wallace 2012.
51. SAL, MS953/4/1/ST92, MS953/4/1/ST93.

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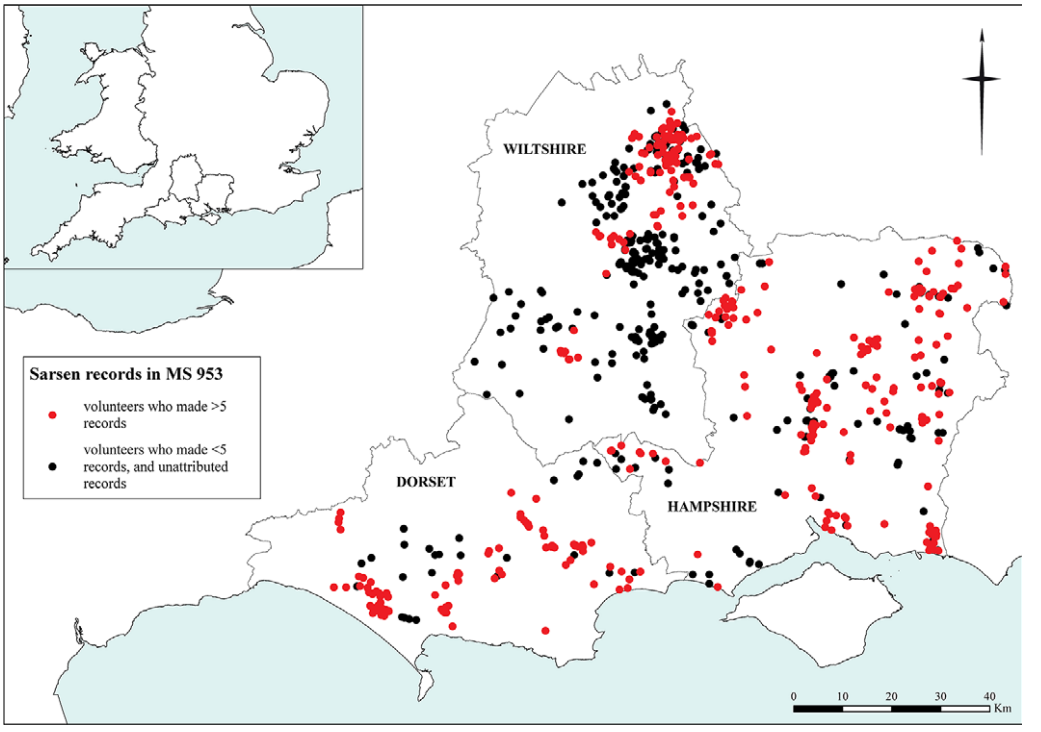

Fig 6. The distribution of all 872 digitised Sarsen Stones in Wessex project records distinguishing the most prolific volunteers. Includes Ordnance Survey data from 2017. *Map*: the author.

how the sarsen profile in Wiltshire differs from Dorset and Hampshire because of these recording practices.

Portesham (Dorset) provides a useful case study of aspects of the volunteers' practice and presents a means to reflect on the Sarsen project's stated aims. A large parish in the south of the county, Portesham's solid geology spans the late Jurassic to late Cretaceous, with an area of Tertiary Bracklesham/Barton Group deposits forming the highest hills to the north (fig 7). It lies immediately to the south-east of a surviving sarsen spread in Littlebredy parish. Portesham's records are for a mix of 'natural' sarsens recorded singly and in groups, prehistoric monuments and extensive sarsen use in more recent structures. Seventeen distinct records were made here, by three volunteers working from April 1974 to May 1975. No notes explain whether the large gaps were searched to no avail, or could not be accessed. The Tally Cards include material gathered from earlier published authorities, which the volunteers ground-truthed, as well as seeking out new data. The volunteers adapted their observations to the Tally Card format, resulting in a rich record including quotations from antiquarian authorities and in-person reports.

Two original reference numbers include multiple entries: PRT6 (Portesham village) and PRT7 (Black Down Barn area) account for ten of the records mapped in fig 7. In PRT6, one sarsen (D082) was visible as the result of recent building demolition. Two stones mapped by the Ordnance Survey in 1902 (D079) could not be found. There were very many stones in building fabric (D077, D078, D080, D081). This included a long wall along the west side of Front Street and garden walls on the east side including more than

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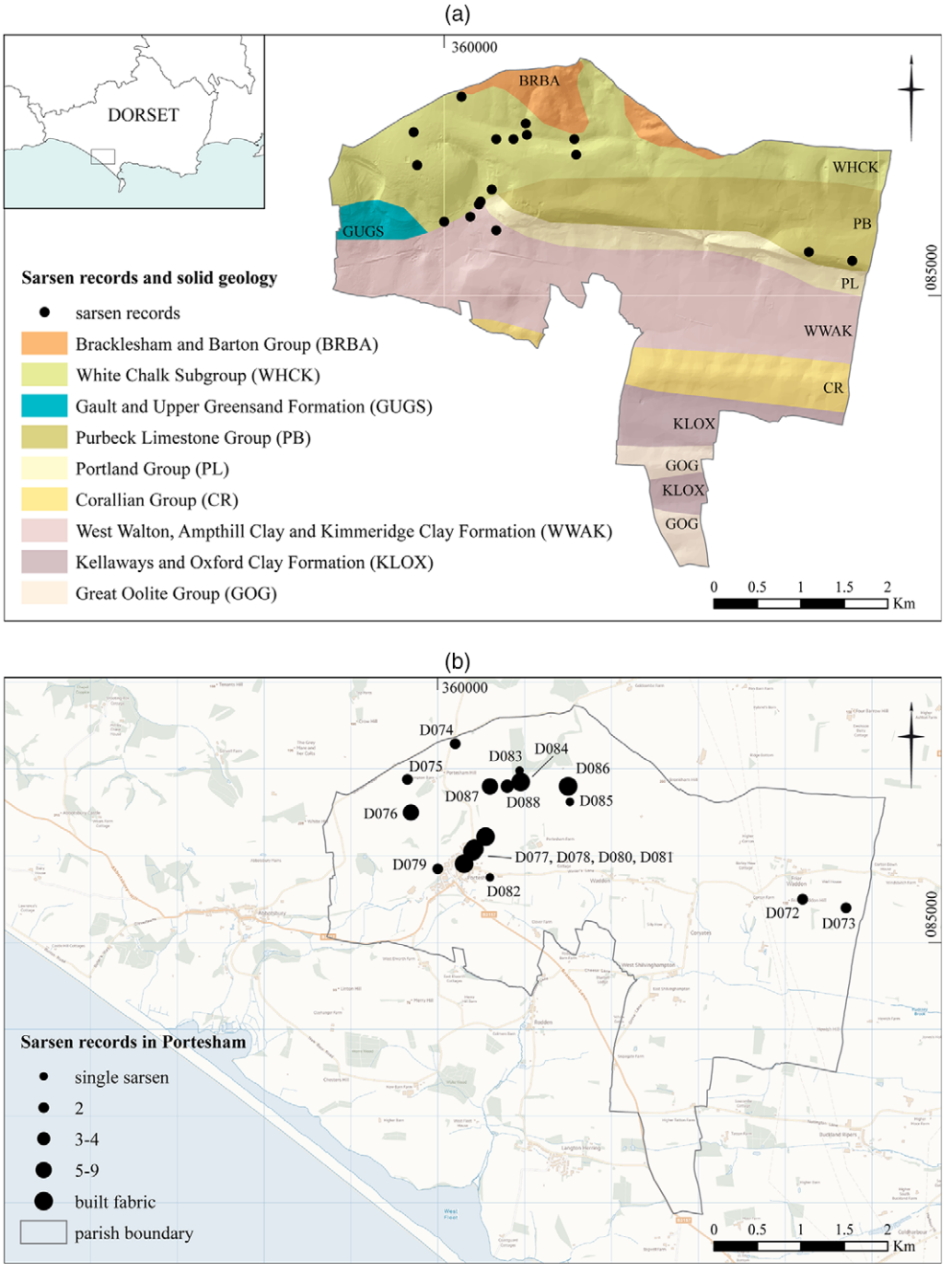

Fig 7. (a) The solid geology of the large parish of Portesham (Dorset) includes Cretaceous and Palaeogene rock units with which sarsen stone is commonly associated. (b) A short distance to the south-east of Dorset's large natural sarsen spread in the Valley of Stones, Portesham includes sarsens used in multiple ways since prehistory. See text for details of records numbered D072 to D088. Includes Ordnance Survey data from 2017 and British Geological Survey data from 2018. *Maps*: the author.

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160 sarsens (D080), and field walls on Portesham Lane (D081). Amongst PRT7, one sarsen (D083) was seen in a hilltop plantation but the other three reports in this record are also structural. D084 records sarsens used in agricultural building fabric, D085 refers to a single stone spotted in a field wall, and D086 includes more than 250 sarsens counted in field walls. On 16 September 1974, volunteer M Jackson noted in D084: 'farmworker said pasture grass of the field had been re-laid in past with great difficulty as many "boulders" just beneath the surface of the ground ... [in] the field of the Hell Stones [D087] the ploughing is extremely difficult because of the numbers of large rocks below the surface of the ground.'[52]

In other records, D072 and D073 in the east of the parish represent four sarsens described as 'not utilised' (ie 'natural'), partially visible in the turf on the hilltop. One of the pair in D072 was 8ft long (2.4m). Combined with D074, two large 'not utilised' stones recorded by John Bailey as 'intermediate Valley of Stones and Black Down group',[53] this suite of records strongly suggests a once far greater presence of sarsen extending south-east of Littlebredy's surviving sarsen spread, in fields long-since cultivated. Taking this closer look at the richer information available in the records shows how the Sarsen survey made progress towards its first aim, to establish sarsen's former incidence.[54]

The second objective, to document prehistoric sarsen uses, was also addressed in Portesham. Four monuments incorporating sarsens were recorded in the parish. D075 records the remains of the long barrow[55] on the hilltop close to D076, Hampton Stone Circle.[56] On the hill opposite to the east is D087, the Hell Stone long barrow,[57] whilst D088 marks the location of the former stone setting 'Jeffrey and Joan and their dog Dinty and Eddy'.[58] In his record for D085, M Jackson noted 'Celtic' fields in the environs, on the north-facing slope of the valley defined by the spur of high ground running east-west from Portesham Hill. This sort of information was a Tally Card class intended to flag up possible co-locations of sarsens and other features, including early field systems.

DISCUSSION

Landscape archaeology

The concept of landscape archaeology, founded on the doing of field archaeology as exemplified by Aston and Rowley in their seminal book *Landscape Archaeology*,[59] forms the Evolution project's contemporary intellectual setting. Although not calling itself 'landscape archaeology', the Evolution project as conceived, and its Sarsen survey as executed, can both be placed firmly in the context of increasingly panoptic approaches to archaeological fieldwork in the twentieth century. Here is it important also to draw on the

52. SAL, MS953/2/1/PRT7.
53. SAL, MS953/2/1/PRT3.
54. Bowen and Smith 1977, 185, 190.
55. HE, scheduled monument DO507; Dorset HER 1 090 044.
56. HE, scheduled monument DO46; Dorset HER 1 090 058.
57. HE, scheduled monument DO87; Dorset HER 1 090 033.
58. Dorset HER 1 090 085.
59. Aston and Rowley 1974, 19–24.

professional history of Collin Bowen in particular, his recognition of the extensive archaeological record visible on the ground and from the air, and his realisation of its vulnerability.

Dalglish has identified three axiologies of landscape[60] – three ways of locating value encompassing ethics and aesthetics amongst the web of agents, practices and being that comprise 'landscape' – each of which defines landscape differently. Archaeologists have conceptualised landscape according to all three: *anthropocentrically*, prioritising human interests in an objectified and commodified natural resource; *environmentally*, emphasising inherent value in the non-human world; and *relationally*, by denying, removing, connecting or eliding the human–non-human dyad that has tended to put 'natural' and 'cultural' landscapes in tension or contradiction.[61] Prior to more recent relational approaches, archaeologists have tended to adopt anthropocentric or environmental axiologies in which landscape, conceptualised as a material object, is susceptible to mensuration, recording and interpretation, especially in functionalist, adaptive, exploitative terms.[62]

Characteristics of an anthropocentric landscape axiology, in which field survey methods can be brought to bear on landscape-as-object in order to reveal how people adapted to, or exploited, the environment, inhabit the language of the Evolution project proposals and the Sarsen survey. The use of that key word *palimpsest*, introduced to archaeologists by Crawford[63] and popularised by Hoskins,[64] speaks to the project proposers' conceptualisation of landscape as 'hand-made artefact'.[65] For example, Bowen's intention to quantify natural phenomena (sarsens) envisioned as hindrances to the first people to have established ownership of the land by its division, was driven by the idea that fragments of the first-written landscape remain, and the possibility of unpicking these through meticulous survey.

The Portesham results fulfilled expectations of anthropocentric and environmental landscape axiologies. Its palimpsest as captured by Sarsen survey volunteers included the underlying geology, determining the presence of boulders in the parish. These had been exploited as useful resources at different times in over-written sequences of prehistoric monument building and more recent settlement structures and boundaries. The undertext included prehistoric field systems; but there was also confirmation of difficulties presented by the geology to agricultural practice, through the testimony of a modern farmworker. The volunteer-collected data showed how people had exploited, and adapted to, the environment.

The Sarsen survey in particular was formulated and driven by Collin Bowen (1919–2011), an investigator with the Royal Commission on the Historical Monuments of England (RCHME) from 1949, who since 1952 had been collecting and enumerating archaeological features parish by parish for the Commission's *Dorset Inventory* volumes. Bowen was celebrated for his superior fieldcraft, described as 'a level of analytical fieldwork that never before had been achieved even by those of the stature of Crawford'.[66] For Bowen this was not only a metaphorical patrimony in the British field archaeology tradition maintained by the RCHME,[67] but also a literal one in his friendship with and likely pupillage by

60. Dalglish 2012.
61. Ibid, 329–33.
62. Darvill 2008, 61–2; Dalglish 2012, 333–4; Thomas 2012, 98.
63. Crawford 1953.
64. Hoskins 1955.
65. Gillings and Pollard 2016b, 11.
66. Taylor 2010, 85.
67. Ashbee 1972; Bowden 1999.

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O G S Crawford himself.[68] His approach to archaeology was characterised by his obituarist: 'No books, no theory, just detailed fieldwork on archaeological sites.'[69]

Believing that the first farmers in Britain encountered and transformed a heavily wooded environment, archaeologists reasonably anticipated confirmation of Neolithic origins of prehistoric field systems.[70] These expectations permeate a number of the papers given at contemporary conferences including in 1969 'Economy and Settlement in Neolithic and Early Bronze Age Britain and Europe',[71] the 'Highland Zone' in 1974 and 'Lowland Zone' (1975) Effect of Man on the Landscape meetings.[72] Bowen shared this interest in prehistoric field systems.[73] The rationale of the Evolution project and the Sarsen survey depended on his anthropocentric understanding of the agricultural processes leading to the formation of these archaeological features. His concern with stone clearance was underpinned by his assumptions about what the first farming looked like: the lowest layer of the palimpsest had to have been inscribed by clearing and breaking up ground, because, according to Bowen, that was the first requirement of agriculture 'for all periods'.[74] His original objective for the survey was to assess this essential clearance by recording how and where the sarsens had been used.[75] With Peter Fowler, Bowen had already encountered sarsens buried in lynchets during their work on the Marlborough Downs in Wiltshire. Finds including early Neolithic bowl pottery excavated from their cutting through one such field boundary[76] implied that there had been Neolithic activity in the area, perhaps prompting Bowen's thoughts about sarsen's nuisance value to pioneering agriculturalists.

In Portesham, however, the presence of prehistoric sarsen-built monuments in an area including prehistoric fields challenged Bowen's key assumptions. Bowen and his colleagues had recorded numerous field groups in and around Portesham,[77] and it was an area he referred to in *Ancient Fields*.[78] Here, the palimpsest's undertext thus comprised evidence for sarsen exploitation as a resource (for the earliest monument building), *and* no clear evidence that a discouraging stony presence had directed early cultivation elsewhere. The difficulty lay in both the problematically-long date range of 'Celtic' fields, defined as 'all fields of regular shape laid out before the Saxon conquest',[79] and also the expectations that underpinned the survey's stated aims, derived from an anthropocentric concept of landscape.

In notes accumulated in his project filing, Bowen wrote:

> Do sarsens attract interest. They didn't make people avoid. Two points we began with were
> a) nuisance value b) challenge to utilisation.

68. Taylor 2010, 87.
69. *The Times* 2011.
70. For example, Evans 1971; Fowler 1971; Pryor 1978.
71. Simpson 1971.
72. Evans *et al* 1975; Limbrey and Evans 1978.
73. Bowen 1961.
74. Ibid, 5.
75. HEA, SOA03/18, memoranda written by Collin Bowen dated 23 Nov and 20 Dec 1973.
76. Bowen and Fowler 1962, 105.
77. RCHME 1970, 622–34.
78. Bowen 1961, pl 2b.
79. RCHME 1970, 622.

- sarsens are utilised in all periods
- orthostats and large stones are restricted Neo/BA
- the earliest therefore for the [...] of sarsens as boulders is Neo
- the earliest [...] for the breaking up of sarsens is also NEO

Nuisance/utilisation: Did they attract??!! GEOL SURFACE CONCS NOT AVOIDED BUT OCCUR WHERE EARLY NODAL CONCS AVEBURY, VALLEY OF STONES[80]

Although his crabbed handwriting is difficult to interpret ('CONCS' is probably shorthand for 'concentrations'), not only was Bowen forced to conclude that sarsens presented no impediment to early farming (in the terms in which that farming was understood at the time), these manuscript notes also suggest that Bowen began to consider the possibility that the sarsens themselves *drew* people into certain locations, including north Wiltshire.

The archaeological record, revealed and under threat

The relationship between the aims of the Evolution of the Landscape project and the Sarsen survey results remained unspoken, as the parent-project faded away in the later 1970s. This is not the only reason, however, that the survey results were not related more closely to the Evolution project's aim to understand 'the whole time-conditioned environment'.[81] The empiricist approach taken towards both projects, in which Bowen at least saw it as essential to collect as much data as possible, despite openly acknowledging the crippling resource required, was problematic. Whilst seeking to move beyond studies of individual monuments in the hope of understanding past populations' economic and social organisation from more wide-ranging data,[82] the projects were under-theorised in how their empiricist methodology would cast light on the past.

The contiguity of the archaeological record was well-established in Bowen's mind through decades of fieldwork and studying aerial photographs. Having driven RCHME survey practices towards detailed description and interpretation,[83] he was moving conceptually ever further from the restrictions of monument-based inventorying within parish boundaries to wider landscapes, as indicated by his work on Bokerley Dyke.[84] His colleague Barry Cunliffe had done the same through an extensive survey of 'the total settlement pattern' of Chalton (Hampshire).[85] The call for the Evolution project to make 'a *total* search'[86] (original emphasis) of *c* 1,500 square miles of ground with air photograph analysis to plan archaeological features chimes with the 'Total Archaeology' and 'total landscape' of Bowen's RCHME colleague, Christopher Taylor.[87] By this, Taylor meant a multi-period and landscape-scale approach to research, going beyond a narrow single-site focus.

80. HEA, SOA03/16, Sarsens. Notes.
81. HEA, SOA03/18, Society of Antiquaries. Evolution of the Landscape Project.
82. Bowen and Cunliffe 1973, 9.
83. *The Times* 2011.
84. Martyn Barber, pers comm, 26 Jul 2017.
85. Cunliffe 1973.
86. Bowen and Cunliffe 1973, 10.
87. Taylor 1974, 150–1.

He emphasised bringing, for example, geomorphology, art-history and place-names to mapping to 'trace the ebb and flow of agriculture in an area for 2,000 years'.[88]

In contemporary excavation, a similar approach was espoused by, for example, David Clarke in 1975 at Great Wilbraham[89] and by Margaret and Tom Jones working at Mucking from 1965 to 1978.[90] Investigating Mucking's extensive archaeology, Margaret Jones was confronting outmoded concepts of bounded site and monument whilst aspiring to 100 per cent excavation. Like Taylor, Clarke also advocated the assembly of diverse datasets to understand a 'totality' of evidence. Clarke's intention was to develop a scientific interdisciplinarity in partnership with expert colleagues from areas including botany and quaternary science. The extended Evolution project proposal authored by Barry Cunliffe, John Coles and Collin Bowen mentions a similarly wide-ranging set of interests and specialists,[91] including Geoffrey Kellaway (geology), David J Carter and Keith Barber (geography), Geoffrey Dimbleby and John Evans (environmental archaeology), Annie Grant and J Gaitens (osteo- and zoo-archaeology). As Bowen put it, 'we are a multidisciplinary project'.[92]

In 1960, Bowen had co-authored the highly influential *A Matter of Time*,[93] using aerial photography to identify the rapid loss by quarrying of archaeological remains in river valley gravels. The aerial evidence had finely attuned his understanding of risks to historic landscapes. Threat similarly permeates the tone of the Evolution project's archived papers. A general threat to the archaeological resource, including explicit references to prioritising Society of Antiquaries' budgets, underpinned the justification for the Evolution of the Landscape project. Threats to sarsens in particular were at the forefront of Bowen's mind. For example, he wrote to friends and colleagues on 23 November 1973 lamenting sarsen clearance by the estate manager from an area north of Old Totterdown (Wiltshire), commenting, 'It seems further to illustrate the desirability of listing all such sites in a way that would ensure archaeological/geological examination before destruction'.[94] On 20 December he followed this with the need to identify ownership to discourage stone clearance.[95]

The point was emphasised in the Information Sheet issued to project volunteers.[96] Attendees of the Sarsen Symposium agreed that intelligence about sarsen destruction should be passed on to the Society's Secretary so that investigations could be arranged.[97] Even in 1978,[98] Bowen was pursuing correspondence with the National Trust regarding a local farmer's clearance of sarsens from land close to the protected spread in Piggledene (Wiltshire). Concern at the loss of sarsens from 'natural' spreads by agricultural clearance could be said to have begun with Colt Hoare,[99] but it came to a head with the early twentieth-century campaign to protect sarsens from quarrymen working in Lockeridge and Piggledene

88. Ibid, 150.
89. Evans *et al* 2006, 118.
90. Evans *et al* 2016, 2.
91. SAL, MS953/1/1, Proposal for sponsorship of a scheme of research by the Society of Antiquaries of London.
92. HEA, SOA03/01, Evolution of the Landscape 23 Feb 1973.
93. RCHME 1960.
94. HEA, SOA03/18, memorandum written by Collin Bowen dated 23 Nov 1973.
95. HEA, SOA03/18, memorandum written by Collin Bowen dated 20 Dec 1973.
96. HEA, SOA03/01, Evolution of the Landscape, Wessex Pilot Scheme News Sheet No. 1.
97. HEA, SOA03/03, Sarsen Symposium, Evolution of the Landscape Project News Sheet No. 2.
98. HEA, SOA03/03, letter written by Frank Swanton dated 21 Feb 1978.
99. Colt Hoare, 1819.

in Wiltshire.[100] 'Those who have watched the district through this century,' wrote local observer H C Brentnall, 'have seen the wolf at work in many a fold of the grey-wethers.'[101] This sarsen advocacy formed the backdrop to Bowen's angst.

The Society of Antiquaries' need to respond to these threats, Bowen's call for detailed extensive survey in the manner of 'total archaeology' as the extent of the record became clear and his personal concern for sarsen stones are similarly reflected in a contemporary call to arms by Aston and Rowley. They wrote, 'Scholars in the future may have the leisure to analyse and synthesise, but at the moment we are all in the front line', calling for 'comprehensive regional archaeological distribution maps'.[102] In this sense the Society's research, promoted by Bowen and his peers, exemplifies the contemporary awareness of archaeological loss[103] and the requirement to collect data that prompted the establishment of local authority Sites and Monuments Records at that time.[104]

CONCLUSION

Collin Bowen was an important figure, influencing a generally more frequently published generation of researchers like Corney, Fowler and Taylor,[105] for whom, as Gillings and Pollard remark,[106] the idea of landscape archaeology and history arguably seemed straightforward. He held an anthropocentric concept of landscape as a resource to be tapped by the first farmers, and an object of partial features that could nevertheless now be observed, measured and represented if only they could be salvaged in time. The Evolution project has those Hoskinian hallmarks of landscape archaeology identified by Johnson:[107] deeply empirical practices employed by surveyors not afraid to dirty their walking-boots to study a landscape of immense age, beguiled, as Johnson suggests,[108] by the idea of the palimpsest.

The Evolution of the Landscape project was an aspirational response to some of archaeology's most pressing cultural resource management problems of the later twentieth century, including the impact of industrial agriculture and large-scale infrastructure development destroying un-researched archaeological evidence. Society of Antiquaries' Fellows were concerned about how to dispose finite research grants in the face of widespread threats to an archaeological record that had been extended physically by aerial photographic evidence and conceptually by the leap from 'site' to 'landscape'. Collin Bowen was a significant contributor to this understanding and the driving force behind the project's proposals, attempting to harness multi-disciplinary research to tackle the idea of 'total landscape'.

The Sarsen survey struggled partly because of the limitations of its anthropocentric landscape axiology and partly because of difficulties in handling its highly heterogeneous analogue data in all its varied formats. In fact, the project's aim to explore how sarsen stones had been dealt with by the first farmers was tantamount to an unspoken

100. Goddard and Bouverie 1908.
101. Brentnall 1946, 424.
102. Aston and Rowley 1974, 12, 25.
103. Rahtz 1974.
104. RCHME 1993.
105. Fowler 1978; Taylor 1983; Corney 2000.
106. Gillings and Pollard 2016b.
107. Johnson 2007.
108. Ibid, 58.

acknowledgement that the boulders themselves had been active agents in Neolithic and later lifeways. But the absence of a concept of, for example, agential stones in the sense of, say, Richards,[109] or an ambiguity of natural-cultural place,[110] hindered the extent to which the datasets could be applied to the objectives articulated in 1972 and 1973.

Nevertheless, the public archaeology methodology was ambitious in its response to a research burden that could not be met by the professional sector. The valuable archive resource is strengthened by the myriad notes that back up the volunteers' individual records and considerable weight can be placed on their observations. The survey's large dataset presents some difficulties in both its heterogeneity and current physical condition, but, approached with the spirit of contingency and creativity encouraged by Evans *et al*,[111] and in digital form, the data can more easily be visualised and interrogated in order to play a part in informing our perceptions of sarsen-scapes. Thanks to collections cared for by the Society of Antiquaries of London and Historic England, new life can be breathed into old archaeological archives.

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ABBREVIATIONS AND BIBLIOGRAPHY

Abbreviations

HE	Historic England
HEA	Historic England Archive
HER	Historic Environment Record
RCHME	Royal Commission on the Historical Monuments of England
SAL	Society of Antiquaries of London

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HEA, Swindon, HSS01, Hampshire Sarsen Survey
HEA, Swindon, RCHME Microfiche, Wessex Sarsen Survey
HEA, Swindon, SOA03, Sarsen Stones in Wessex
SAL, MS953, Wessex Sarsen Survey

109. Richards 2013.
110. For example, Bradley 2000; Harmansah 2014.
111. Evans *et al* 2016, 526–30.

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