Review of: Parker Pearson, M., Pollard, J., Richards, C., Thomas, J., Tilley, C. & Welham, K. (eds) (2020). Stonehenge for the Ancestors, Part 1: Landscape and Monuments. Leiden: Sidestone Press. 606 pp, 202 illustrations (b/w), 190 illustrations (colour), hb/pb/online. ISBN 978-90-8890-702-9. https://www.sidestone.com/books/stonehenge-for-the-ancestors-part-1

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This is the first of four volumes setting out in full the results of the Stonehenge Riverside Project (hereafter SRP), a major archaeological study of the Stonehenge landscape in Wiltshire, England, under which fieldwork took place between 2003 and 2009. The project is led by Professor Mike Parker Pearson, together with a stellar team of archaeologists from several British universities, who have all contributed to this opening volume. The introductory chapter sets out the extraordinary vision and scope of the endeavour, with a map (Fig. 1.7) showing the location of the 56 trenches excavated, reminding the reader of the sheer scale of the project. Originally fieldwork was conceived to test the hypothesis that Stonehenge was a monument to the ancestors and was linked to the ceremonial timber and earth complex at Durrington Walls, interpreted as the domain of the living, by the River Avon (PARKER Pearson & Ramilisonina, 1998). However, as the project developed several other research objectives emerged, leading to investigations at the Stonehenge Greater Cursus and nearby Amesbury 42 long barrow, at two natural sarsen stones (Cuckoo Stone and Tor Stone), at a bluestone scatter near Fargo Plantation and a sarsen-dressing area to the north of Stonehenge.

This first volume covers all the sites investigated in the wider landscape around Stonehenge and work undertaken at Stonehenge itself, where Aubrey Hole 7 was re-excavated. Volume 2 is due to provide various syntheses of artefactual and ecofactual evidence, Volume 3 dedicated to Durrington Walls and Woodhenge, and Volume 4 will include all results from later periods, from the early Bronze Age onwards. This first volume is roughly chronological with earlier chapters dedicated to early Neolithic monuments and sites, followed by largely late Neolithic results. Although the aim to keep all material later than this for Volume 4 appears logical, it does lead to some frustrating omissions. For example, the Bronze Age postholes at West Amesbury henge are mentioned but not discussed, and the radiocarbon dates for cremations buried near the Cuckoo Stone are given but no further details are provided.

The monograph is a hefty 602 pages, packed with in-depth specialist reports and thorough excavation descriptions. The publisher Sidestone Press has used an innovative publishing model, with the book available at various prices: an expensive hardback, a less expensive paperback, a very modestly priced downloadable PDF, or a free version to read online. This aim to provide free public access is admirable; the website informs that it has been read online 890 times since publication in October 2020. The PDF is perhaps the most useful format - easy to search by keyword and to selectively read about the relevant site, as this is first and foremost a reference volume, rather than something to be read cover-to-cover. There is no overall conclusion at the end, and most of the chapters end rather abruptly without summary or synthesis and cross-referencing between the chapters is somewhat lacking. Perhaps the synthesis will come in a later volume in the series. However, reading the entire volume is well worth the effort, as there are significant results presented, as well as some insightful and useful analyses. The figures are of variable quality and not plentiful; a consistent style for mapping would have reduced several accessibility and appearance issues. Figures 2.1 and 9.1 are examples of maps that are not easy to read. Some drawings are reproduced rather small (e.g. Fig. 7.11); others are far too large (e.g. Fig. 6.16-19). Many sections would have benefited from more photographs and detailed maps, particularly the phenomenological accounts of travelling along the cursus, the avenue or the River Avon, to assist those less familiar with the landscape.

Some of the work presented in this volume has been previously published elsewhere, either within SRP books aimed at the public (PARK-ER PEARSON, 2012; PARKER PEARSON ET AL., 2015) or within academic papers (Parker Pearson et AL., 2009; Thomas et al., 2009; Allen et al., 2016; WILLIS ET AL., 2016). On occasion, it is difficult to know whether certain chapters are edited versions of previously available work or contain new information; close reading and comparison is required. Some chapters see the welcome publication of research based originally on student MA and PhD theses (Whitaker, 2010; Willis, 2019). However, the great achievement of the volume is that it finally presents the detailed results of the research excavations that many of us have heard so much about over the past 15 or so years. For example, here we have the details those periglacial stripes and chalk ridges under the avenue, the evidence for the stone circle at West Amesbury, the interpretation of Aubrey Hole 7 at Stonehenge as having held an upright stone and the evidence for the dressing of a single sarsen stone to the north of the monument. This volume allows the evidence to be scrutinised and interpretations to be assessed.

After setting out the background to the SRP and its evolving objectives and providing a brief introduction to the key sites in Chapter 1, Chapter 2 by Welham and Tilley focuses on early Neolithic long barrows, cursus monuments and causewayed enclosures in the Stonehenge area. The section on long barrows is a valuable discussion on their landscape positioning and includes a useful table, including their orientation, dimensions, and shape (Tab. 2.1, 2.2). Intervisibility studies between these early Neolithic monuments are a little speculative without evidence for the date of their construction as only three long barrows have absolute dates associated with them. There follows a classic phenomenological account of walking the Greater Cursus in either direction (p. 53-56), presented without reference to recent scholarship that examines the value of such accounts in generating valid archaeological interpretations (e.g. Brück, 2001; Brophy & Watson, 2018) nor to alternative interpretations that the cursus might have formed a barrier to people and their animals moving north-south along the dry valley of Stonehenge Bottom (Pearson & Field, 2011, figs 16-17, 38-39). After some interesting ideas about different cosmological worlds of higher ground, surface watercourses and 'dead rivers' or dry coombes (p. 58), there is a slip back into rather simplistic ideas about long barrows being used by small communities and cursus monuments by larger kin groups.

Chapter 3, authored by Thomas and Pollard, incorporates the excavations at the Greater Cursus and nearby Amesbury 42 long barrow, as well as early Neolithic activity at Woodhenge. The introduction to the cursus excavations repeats elements of the previous chapter somewhat but otherwise this is a valuable report on some crucial excavations in the Stonehenge area, with clear plans and sections, useful photographs and detailed contextual information. Like the other chapters that follow, there are specialist analyses of geophysical survey, soil micromorphology, radiocarbon dating, ecofactual and artefactual analysis (antler, pottery, worked flint, human remains, land snails, charred plant remains and wood charcoal, as well as a chalk artefact from

the Greater Cursus) which are usefully detailed. Analysis of the distribution of worked flint shows that the westernmost ditch of the cursus was deliberately selected as a suitable place to reduce flint nodules, whereas other parts of the cursus had sparse evidence for flint-working (p. 128). The excavations have provided important radiocarbon determinations on antler that date the construction of the Greater Cursus and Amesbury 42 long barrow, as well identifying a series of re-cut pits at both sites dating to the late Neolithic, when the monuments appear to have been reinstated in the landscape. The excavation of a tree-throw pit and hollow at Woodhenge containing carinated bowl pottery, animal bone and worked flint shows evidence for considerable activity in the early Neolithic. It is possible that signs of this occupation were still visible in the late Neolithic when Woodhenge was constructed; one was filled with rammed chalk before the henge bank was raised. The pottery report by Cleal includes a thorough discussion of early Neolithic pottery from the Stonehenge landscape (p. 150-151), concluding that the material from Woodhenge is most closely paralleled at Coneybury Anomaly and as such represents activity from the earliest Neolithic.

Moving away from detailed excavation reports, the next section (Chapter 4, by Parker Pearson and Richards) focuses on the Stonehenge bluestones, the components of that monument brought from the Preseli Hills in south-west Wales. The chapter examines the suggestion that the Aubrey Holes at Stonehenge held bluestones and presents the results of investigations at the bluestone scatter at Fargo Plantation and preliminary work at a pit circle north of Airman's Cross, both located to the north-west of Stonehenge. Here the argument is that the Aubrey Holes, 56 pits set just within the bank and ditch at Stonehenge, held stone pillars, rather than containing timber posts or simply being pits. Figure 4.5, a chart that compares the width and depth of a variety of stoneholes, postholes and pits, clearly demonstrates that these were not postholes. But what about simple pits? The evidence for the stone pillar interpretation rests on the evidence from the re-excavated Aubrey Hole 7, which is not presented until later in the chapter. Here, we learn that a 40 mm thick patch of crushed chalk remained in the base of the pit, described as having 'lost its structure' due to the pressure of a heavy stone (p. 182). It is difficult to know if this layer was crushed in prehistory or is simply a trample layer from when the Aubrey Hole

was excavated in the past (the SRP investigation was the third time this pit had been excavated). In any case, the crushing interpretation is not substantiated by the soil micromorphological analysis (p. 190). A rather large amount depends on the interpretation of this crucial context and it would have been good to see a full analysis of the previously excavated Aubrey Holes; much of the volume is written as if it were proven fact that the Aubrey Holes contained stones. This reader at least would like to see more evidence for this; it must be a future research priority to excavate an undisturbed Aubrev Hole. Discussion proceeds to the dressing of the bluestones and where the two bluestone trilithons may once have stood at Stonehenge, concluding that they were part of the small (10 m diameter) bluestone circle which stood briefly at the centre of the site (p. 175). The idea that they spanned the north-east entrance as part of the Q and R hole setting is dismissed, as the lintels are claimed to be too short, but the measurements presented here are significantly different to those presented in the results of the laser scan of the monument (ABBOTT & ANDERSON-WHYMARK, 2012, 50) and need to be clarified. Further discussion at the end of chapter (p.212-213) suggests that the undressed varied bluestones of the present outer circle may have had longer histories than the dressed pillars of the inner horseshoe, which are postulated to have stood at West Amesbury henge. It would have been good to see more consideration of the Q and R holes here, in terms of their shapes and sizes, and the geology of the chips recovered from them. Despite these criticisms, the discussion of the Stonehenge bluestones and how they fit into the overall phases of Stonehenge (and potentially elsewhere) is valuable, as are the details of the Aubrey Hole 7 excavations, including an undisturbed cremation found on the edge of the main pit, now known to be one of the oldest dated individuals buried at the site. The bluestones clearly had varied and complex histories of movement, dressing, arrangement, re-arrangement and removal; as the authors say, the final phase of Stonehenge is clearly a 'merging and consolidation' of multiple components into one monument (p. 300).

The search for potential dressing or standing sites for the bluestones elsewhere in the land-scape led to an investigation of a potential bluestone scatter near Fargo Plantation and the Greater Cursus, identified during fieldwalking in the 1940s. Careful investigation through the digging of 104 test pits has produced detailed distribution

maps of sarsen, bluestone, worked flint, burnt flint, pottery, flint tools and cores (Fig. 4.32-39). Although a concentration of bluestone fragments was found, overall numbers were low (seven pieces), and no associated features were identified. It seems likely that these fragments relate to the breaking up of a bluestone in the early Bronze Age, given a correlation with Beaker pottery and flintwork of that period. The final part of Chapter 4 presents the results of test pits dug at a pit circle identified through geophysical survey to the north of Airman's Corner (p. 209-211), thought to be a candidate for a bluestone circle; further excavations were planned here but were not permitted. The low densities of worked flint and lack of bluestone fragments suggests that this may simply be a post or pit circle.

Chapter 5, written by a team led by Parker Pearson, publishes the results of excavations at West Amesbury, where a stone circle and henge were found where the Stonehenge Avenue meets the River Avon. This important discovery, hitherto unknown and only seen on geophysical survey results with the benefit of hindsight, is key to understanding the Avenue and riverside area, and provides crucial evidence for the history of the bluestones. The archaeology of the stoneholes and henge ditch are presented in detail, showing the varied types of stoneholes and packing used, and clearly setting out the argument for them having held bluestone pillars. Laser scans and good photographs of the stoneholes help the reader to picture the evidence clearly, particularly the impressions in the base of stonehole D. Despite a series of six Neolithic radiocarbon determinations on samples of animal bone and antler picks from the monument, the chronology remains unclear and there is some tension evident here between the authors; much depends on how the contexts are interpreted (p. 273). The large and multi-period flint assemblage from this site is particularly interesting, including non-local Bullhead flint, and a concentration of Neolithic chisel arrowheads. Chan's analysis and discussion of this material is hugely informative, exploring the association between different forms of Neolithic arrowhead and pottery styles (p. 294-295). Excavations of the nearby avenue ditches nearby revealed a series of nine postholes and packing that suggest this section of the avenue was originally a fenced palisade (p. 259).

Chapter 5, written by a four-author team led by Chan, turns attention to the sarsens at Stonehenge, presenting the results of a small trench dug to the north of the monument which revealed

a sarsen dressing area. Astonishingly, the project appears to have found the sarsen debris from the shaping of a single sarsen monolith, with a 'stone shadow' or hole within the debris showing its recumbent position. The analysis of huge quantities (34,941 pieces) of sarsen from this site has clearly been a mammoth task, and an interesting contrast is presented with a nearby trench across the avenue, where far less evidence for stone-working was found. Whitaker's analysis of the hammerstones provides much-needed clarity over terminology and presents careful analysis of their materials, form and use (p. 332-354). 307 quartzite sarsen and flint hammerstones were found, as well as many hundreds of fragments of broken tools; the impression is that this was a landscape strewn with sarsen debris and scattered tools when Stonehenge was being built. Slightly rushed last-minute edits in this chapter to incorporate references to Nash et al. (2020) on the geological origin of the sarsens should perhaps have been captured in a simple note at the beginning of the monograph.

The next chapter, authored by Richards, focuses on excavations around two recumbent natural sarsens in the Stonehenge landscape - the Cuckoo Stone, not far from Woodhenge, and the 'Tor Stone' near Bulford. These revealed that the stones have been the focus for activity over a prolonged period, with associated pits, original stone hollows and stone sockets uncovered, as well as later activity including cremation burials (Cuckoo Stone) and a ring ditch (Tor Stone, detailed in Volume 4). Frustratingly, both original stone hollows and the stone socket at the Tor Stone do not have section drawings, presumably because they were dug in plan. Considering the presence of both a posthole and a stone socket within the Cuckoo Stone hollow (p. 368), and the importance of recognising prehistoric sarsen extraction hollows elsewhere, this is unfortunate. The evidence for the stone socket at the Cuckoo Stone is not clearly elucidated and the sequence somewhat fuzzy - if a post was erected in the hollow after the sarsen had been extracted but before it was erected, where was the stone in the meantime? Nevertheless, the results presented here are important, showing how the act of moving or raising these stones necessitated reciprocal acts of deposition nearby, with digging tools and feasting remains buried in pits near the Cuckoo Stone, and at Tor Stone the marking of the original hollow with a flint and sarsen cairn. The worked flint analysis by Chan shows that a number of artefact types usually thought of as being chronologically sensitive (e.g. petit-tranchet arrowheads and serrated flakes) can actually be found in various periods of the Neolithic (p. 380-381). By comparing with the assemblage from the early Neolithic features at Woodhenge, he shows that chronological difference can actually be identified through subtle differences in the character of core-working. The final discussion by Richards (p. 404-408) expands to include the possibility that the Heel Stone at Stonehenge was a recumbent natural stone nearby before being erected, perhaps providing an impetus for the construction of the monument in this location.

Chapter 8, by Parker Pearson and three others, focuses on excavations of across the avenue: a trench close to Stonehenge and several more located at the avenue 'elbow' and nearby 'Gate Ditch'. Both earth resistance and magnetometry survey were used to survey this portion of the avenue, helping to clarify several details, although it is not clear why resistance survey was not completed over the entire avenue width (Fig. 8.2). This may have helped answer research questions relating to possible stoneholes along the avenue. The trench across the avenue has important results for our understanding of the appearance of the Stonehenge landscape, with the identification of particularly wide and deep periglacial linear features, lying within two parallel chalk ridges, which were later accentuated by the avenue banks. Evidence was found for partial re-cutting of the avenue ditches in the early Bronze Age (p. 427). The results of excavations at the elbow help to disentangle prehistoric and historic features, provide much-needed clarity on Atkinson's previous work, as well as showing how the local topography was subtly used to lay out this part of the avenue. Ruggles has contributed surveys of the solar alignments of this final section of the avenue, showing that only the upper segment would have had an alignment with the winter solstice sunset. Parker Pearson's discussion section suggests that the avenue was built to mark the route of the bluestones from West Amesbury, although this wasn't the most direct route. More convincing is the idea that this unusual "corrugated area of land" (p. 472) near Stonehenge attracted the attention of prehistoric people, who noticed the alignment with the solstice and interpreted it as an affirmation of cosmic harmony, although the explanation rests too much on a binary notion of nature and culture, "the location of Stonehenge [...] may thus be explained by Neolithic people's cultural appropriation of these natural features" (p. 472).

Chapter 11, by a multi-author team led by

Parker Pearson, focuses on the River Avon, a key part of the original hypothesis about the link between Durrington Walls and Stonehenge. The results of an augering survey include important evidence for the form and location of the river in prehistory, as well as detailed palynological evidence for changing environment and tree-cover throughout prehistory. A phenomenological account of travelling down river by canoe emphasises the distinct meanders of this section of the river system, creating a disorientating experience. Here it is clear that the authors (Tilley and Bennett) envisage a journey made by people in boats during some sort of ceremonial event or rite de passage. However, as Parker Pearson and Richards go on to explain, the exact role of the river was not specified in the original hypothesis, and they suggest an alternative, that it was "a metaphoric route for a more intangible passage" instead (p. 497). One could go further to suggest that the avenues that link Durrington Walls and Stonehenge to the river are about connecting these monuments to a source of power, to a flow of energy, and to a wider world of places and meanings, rather than creating a particular routeway. The claim that there is increasing evidence for the role of rivers in funerary rituals in the late Neolithic is not borne out by the sources cited (p. 497) and evidence for this remains very sparse. The question of what people were doing with their dead at the time that Durrington Walls was occupied in the latest Neolithic remains unknown.

Willis's Chapter 10 presents the results of her PhD research on the cremated remains from Aubrey Hole 7. Her summary of all known human remains from Stonehenge is a timely reminder of the sheer quantity of material from the site, much of it now sadly lost. The painstaking work of analysing the cremations has resulted in some fascinating insights into the more than 50 estimated individuals represented by these remains. People of range of ages, from neonate to over 50 years of age were buried, both male and female, with some displaying signs of degenerative disease. A summary and discussion would have been welcome here, perhaps with potential aspects of further study identified.

The final chapter of the volume presents radiocarbon dates from Stonehenge, written by a team of three led by Marshall, presents a series of new radiocarbon dates from the monument. These include dates on the cremations from Aubrey Hole 7, as well as five unburnt human bones and two human teeth excavated from the ditch fills, a stone setting and a possible posthole, and a fragment of pig rib. Although these dates on human bones from Stonehenge have been published elsewhere already (Parker Pearson et al., 2009, tab. 2; Willis ET AL., 2016, tab. 2) it is useful to have a comprehensive and accurate list (Tab. 11.3-4), particularly as these dates have been published at least twice with incorrect rounding of determinations and error ranges (SNEOCK ET AL., 2018, tab. S1; WIL-LIS, 2019, tab. 22). The chapter clearly summarises how these new determinations alter the existing phasing of Stonehenge (DARVILL ET AL., 2012); because most of the dates are obtained on unstratified contexts or are from contexts where they might be residual, there are only minor changes to the overall chronology of the site. A new date on a female cremation from ditch cutting 42 provides a constraint on the digging of the ditch which can now be estimated at 2995-2900 cal BC (95 % probability; ditch_construction, Fig. 11.2), probably 2970-2915 cal BC (68 % probability) (p. 536). However, the main aim of the dating programme was to establish the period during which Stonehenge was used as a burial place. Dates from the cremated and unburnt bone provide a coherent group dating to the first half of the 3rd millennium, but they are not statistically consistent, suggesting more than one episode of use. Two alternative models are presented (p. 539-543): one eliminates a particularly late date on a cremation from the ditch, providing an accurate estimate for the main floruit of funerary activity in the period between 3070-2945 cal BC and 2860-2755 cal BC (95 % probability). The alternative uses a trapezoidal model for the funerary phase of activity, providing a more accurate estimate for the earliest and latest burials at the site. Both should clearly be used together, despite the authors preference for the second of these options.

To summarise, this first SRP volume presents an exceptional range of archaeological evidence that transforms our understanding of both Stonehenge, nearby monuments, and their wider landscape context. Bringing together such a huge range of specialist expertise from a wide team is an extraordinary achievement. At times, the reader must dig through this wealth of information to identify the most significant discoveries, find the more pertinent observations, and make connections between chapters. The effort is well rewarded however, as a detailed and coherent picture of this remarkable landscape begins to emerge.

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