HENRY STOPES (1852–1902): ENGINEER, BREWER AND ANTHROPOLOGIST

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ABSTRACT

Henry Stopes was a prominent Victorian brewery architect and engineer with a lifelong passion for flints and fossils, and an active participant in the Eolithic debate of the late 19th century. He amassed possibly the largest ever private collection of lithic artefacts and, foreshadowing today’s conflicts between development and heritage, endeavoured to mitigate the impact of building near the key Swanscombe site of Dierden’s Pit by prior excavation. Drawing from a substantial archive of original material kindly made available by his grandson Harry Stopes-Roe, this paper introduces Stopes the man, and revisits aspects of his archaeological contribution, sadly curtailed by his early death.


Keywords: Henry Stopes, Eoliths, Benjamin Harrison, Tertiary Man, Dierden’s Pit (Ingress Vale), Victorian heritage curation

INTRODUCTION

Henry Stopes is a minor, and to most, unknown figure in the canon of 19th century antiquarians whose activities provided the foundations of today’s Palaeolithic archaeology. He made no seminal discoveries, or at least none published sufficiently for posterity to recognize, although he was one of the first to collect at Barnfield Pit, Swanscombe. He carried out no groundbreaking methodological work acclaimed in the present day. And, worst of all, he backed the wrong horse in devoting the majority of his anthropological energies to passionate pursuit and promotion of Tertiary Man and the “Eolithic” cause. And yet, there is much to be gained from revisiting Stopes’ anthropological contribution, inevitably diminished by his early death, which, as revealed below, occurred on the threshold of what might have been his flagship legacy. This brief paper attempts to present a more rounded picture of Stopes the man, to review his Eolithic advocacy within the wider context of his other anthropological endeavours, and to consider his work not just as of historical interest, but for its enduring legacy.

FAMILY BACKGROUND AND PROFESSIONAL LIFE

Henry Stopes was born in Colchester, 17th February 1852, youngest child of Christopher and Maria Stopes, into an affluent, professional background. Christopher Stopes (a Quaker elder, born in Britwell, south Oxfordshire, and from a long line of predominantly clergy stretching back to Bishop Aylmer of Tudor times) had spent
time in America, but returned to Colchester and prospered there, having established a brewery in 1828. His first wife Ann gave birth to Henry’s eldest brother Alfred in 1834, but then died in May 1835. However, Christopher Stopes rapidly remarried to Maria Nice (born in Layer Marney, not far from Colchester) who gave birth to a succession of six children from 1837, concluding in the birth of Henry in 1852. Henry was privately educated at two Colchester schools, firstly Stockwell House until the age of 12–13, and subsequently Linton House Academy, where he was a very capable all-round pupil, excelling particularly in mathematics, and developing an interest in fossils and archaeological remains that would continue throughout his life.

As recounted in the British Journal of Commerce (9th July, 1887) in the article accompanying his pin-up portrait, issued as a loose enclosure with that edition of the journal (Figure 1), his eldest full brother Aylmer died after a hunting accident in September 1871, and Henry was summoned from a city apprenticeship at the age of 19 to replace Aylmer as his father’s junior partner in a rapidly expanding business. Henry was evidently highly successful in this partnership, and furthermore developed a complete understanding of every aspect of the brewery process, and of the engineering and structural technicalities underpinning the equipment used and the brewery premises themselves. He was made a full partner in the family business at the age of 21 in 1873, alongside his slightly older brother Arthur; their father retired shortly after, making over the whole business to his sons. At the same time, Stopes became friendly with W.H. Dalton of the Geological Survey, who was mapping in Essex between 1873 and 1876. With Dalton’s support, Stopes, who had distinguished himself in helping map the Essex Red Crag, from which he was a keen fossil collector, was elected one of the youngest ever Fellows of the Geological Society in 1874 at the age of 22. In 1876 he was also elected to the Royal Historical Society, and thereafter he continued to accumulate an astonishing array of Fellowships and Memberships in both the commercial and academic worlds, later being made a Freeman of the City of London. At this point Stopes, although only in his mid-twenties, was now the complete package of brewer, engineer and architect, not to mention geologist and antiquarian.

Stopes was a regular attendee of the annual late summer meeting of the British Association for the Advancement of Science (henceforth, the British Association). He met his wife Charlotte (née Carmichael, daughter of a well-known Edinburgh painter) at the Plymouth meeting of 1877, and they were married in her home town of Edinburgh in June 1879. They set up home in Upper Norwood, south London in summer 1880 on return from their honeymoon tour of Europe, the Middle East and Egypt. Their eldest daughter Marie was born shortly after, in October 1880, and they later had a second daughter Winifred (usually called Winnie) early in summer 1884.

Stopes doted on his daughters, and on the family dog Daisy, but does not seem, despite the fact of his daughters’ birth, to have had an especially warm relationship with his wife. This has been extensively dissected by others, particularly Hall (1977), since this relationship was instrumental in the psychological and emotional development of their eldest daughter Marie, subsequently and consequently to become such a key figure in the related fields of birth control and satisfactory marital relations that she was voted “Woman of the Millennium” by Guardian readers in 1999. There must have been an unbridgeable chasm between Henry’s unbridled and passionate enactment of his Victorian male role and his wife Charlotte’s independent intellect — she was a prominent Shakespearean scholar and proponent of female suffrage — allied to her own restrictively puritanical instincts, as she was to later to write to him on his deathbed:
Figure 1: Henry Stopes, pin-up of the Victorian commercial world
“The sensual look has passed away from your face that so pained me, & you seem to have regained the chastened expression of your youth which made me trust you” (HSR-1) [Throughout this paper, material from the Harry Stopes-Roe archive is referenced HSR-n, and details given in the bibliography]. Nonetheless, there was no question of infidelity or divorce; rather they seem to have remained on friendly and mutually supportive terms but evolved increasingly separate lives, spending increasing time apart and pursuing their own academic and intellectual interests, not to mention business interests in Henry Stopes’ case, which included frequent travel across Britain and Europe, as well as to Canada and the US.

Coinciding with the start of his married life in London, Stopes established his own independent firm of H. Stopes & Co, with premises in Southwark. One of his early projects was the rebuilding of his own family’s brewery in East Hill, Colchester, conducted in two phases between 1880 and 1888, the frontage of which still survives in the present day (Pearson 1999). H. Stopes & Co flourished through the 1880s, carrying out a range of jobs across the UK from minor installations of technical equipment to complete brewery rebuilds. According to Pearson (ibid.) his architectural style was severely functional with zero decoration, with the dramatic exception of his brewhouse tower column for Barrett’s Brewery in Vauxhall, south London, known locally as Barrett’s Column, which was topped by an illuminated bottle, on its side, weighing 3½ tons and 20ft long, free-rotating to act as both dominating advertisement and weather vane. His main contribution to the Victorian brewing profession, however, was in his understanding of the technicalities of the malting stage of the fermentation process, whereby barley was part-germinated prior to steeping. Wanting to support British farmers, but feeling that British barley was of insufficient quality for this process, he instigated an annual exhibition and competition for British barley producers in an attempt to raise standards, remaining Chair of the judging committee until the end of his life. And he published what, for many decades, was regarded as the standard textbook on the subject: Malt and Malting (H. Stopes 1885).

It was, as the brewing fraternity saw it, his betrayal of brewers in support of farmers that lay at the root of his professional downfall. As an undesired result (from the perspective of British farmers) of the repeal of the malt tax in 1880, brewers were focusing on use of the cheapest imported grain enhanced by additives such as gelatinised rice. These factors led British barley producers to agitate for a Pure Beer Bill restricting ingredients of beer to barley, hops, water and yeast. Henry Stopes initially took the lead in resisting this move on behalf of the brewing community, becoming founding president in June 1886 of the Free Mash-Tun and Pure Beer Association — formed to lead opposition to the Pure Beer Bill, the effect of which would be, the brewing lobby anticipated, to greatly increase brewing costs and restrict use of a number of convenient additives. However, Stopes rapidly became converted to the Pure Beer cause, into which he then threw himself “heart and soul” and “greatly distinguished himself” (East Anglian Daily Times, 8th December 1902), having become shocked and astonished by evidence of the range of often poisonous additives used by less scrupulous brewers. His brewing client base then conspired to boycott his business if he persisted in figure-heading support for the Bill, which he did, and then so did they.

Although his business did not formally fold, it underwent a substantial upheaval in the early 1890s. Following a nervous breakdown on a trip to Toronto in July 1891 (HSR-2), he was advised to rest more and get more fresh air, so, although retaining much reduced business premises in London, he moved to Swanscombe, renting Mansion House, the largest property in the village — deliberately
chosen as an advantageous centre for flint-collecting activity. He was forced to give up Mansion House in June 1898 for financial reasons and the desire to have his daughters educated in London, where he set up a house with his wife in Denning Road, Hampstead. He still regularly returned to Swanscombe, however, presumably renting overnight accommodation when needed. From his Swanscombe base, despite increasing bouts of illness culminating in a last 6 months of severe suffering, he devoted the last ten years of his life to accumulation of what may be the most substantial private collection of lithic artefacts ever assembled. He died on December 5th 1902 at the age of only 50, leaving his wife Charlotte struggling financially and frantically hawking his flint collection around prospective purchasers, although remaining sufficiently principled to keep the collection together rather than cash in on selling off its best specimens separately (Walker 2001).

EARLY ANTHROPOLOGICAL INTERESTS AND THE RED CRAG SHELL

Stopes developed an early interest in fossils and, as recounted in Henry Woodward’s anonymously published obituary (Anon 1903), he was whipped at the age of 8 for taking a fossil echinoid to bed with him, to ponder upon its origins. His earliest known archaeological endeavour was a systematic survey in the late 1870s of “Salting Mounds” along the Essex coastline — extensive exposures of reddened earth showing signs of anthropogenic origin. As well as mapping them, he excavated a number of test pits with the deliberate intention of investigating their stratigraphic sequence and any artefactual content, sieving the spoil systematically from top to bottom, and proving the presence throughout of crude pottery, bricks and charcoal (H. Stopes 1879, 1880). Although he failed to find any evidence that proved their age or purpose, he firmly established the presence of human activity throughout the deposits, and this work demonstrates sound archaeological thinking. However, it was his interest in fossil-collecting and a discovery from the Pliocene Red Crag outcrop at Walton-on-the-Naze that was to have greater import for the rest of Stopes’ antiquarian career. In 1880 a fossil specimen of the scallop Pectunculus glycerimis came into Stopes’ possession, obtained from a fellow collector, and carved with an obvious, albeit crude representation of a human face, with a central hole above to facilitate hanging as a personal pendant (Figure 2).

Figure 2: Stopes’ Pectunculus portrait. 20mm scale.

Stopes was convinced by its finder that it genuinely came from the Red Crag, and thus presented it to the 1881 York meeting of the British Association, arguing that it should “substantiate the belief in Crag Man’s existence...and confirm the struggling belief in man’s extreme antiquity” (H. Stopes 1882). The reaction to this claim is not reported in the proceedings, but, as Stopes...
later confirmed, it was rejected and widely ridiculed: not so much for the claim for Tertiary occupation, since geologists and antiquarians across Europe had been engaged since 1860 in the hunt for pre-Pleistocene man (E.T. Newton 1897), but for this particular carving as its evidence. Despite apparently being the subject of much debate and exhibited at the Anthropological Institute, no academic journal would publish it. Stopes later wrote in the foreword to a self-published pamphlet: “I have afforded the scientific world matter for laughter for some years. My turn to laugh is surely and rapidly coming, for man will most certainly be proved to be as old as the Crag.” (H. Stopes 1887).

Stopes went to his grave firmly believing his proof of Tertiary man had been unjustly denigrated. His daughter Marie instigated a posthumous review of the shell by a specially convened committee of the Prehistoric Society of East Anglia (M. Stopes 1913; Sturge et al. 1913). It was subject to a range of investigations, which seemed to indicate that the shell was already fossilised when carved, but that it was genuinely stained and embedded with sand grains indicative of prolonged burial within the Red Crag, inconsistent with a modern fraud. The committee’s conclusion was that “the weight of evidence was in favour of the Pliocene age of the human work [but] it was impossible to speak with absolute certainty...the evidence of further finds would be required.” (Sturge et al. 1913: 332).

So why is this shell (no longer in the Stopes family, thought to have been given to a Museum, possibly the British Museum or the Geologists’ Association) not widely accepted, or at least discussed, in the present day? Firstly, besides that further finds have not been forthcoming, its provenance is by no means impeccable. Its original finder reportedly had it “for some years” before Stopes acquired it (HSR-3), and there is no record beyond the hearsay of the finder of its true context of discovery (M. Stopes 1913). The naive crudity of the image also irresistibly brings to mind a schoolboy hoax rather than the dawn of human art. So how can one explain its staining and the embedded sand? One possibility is that the shell is a Medieval pilgrimage token, the scallop (associated with St. James; Figure 3a) being the widely used symbol for, primarily although not solely, one of the major pilgrimages to Spain, the Camino de Santiago de Compostela. Such tokens were carried as personal pendants or adornments, and often buried as grave-goods (Figure 3b; Spencer 1998) or buried separately overlying the coastline. There are numerous ways in which such a Medieval token could have become buried or reworked into the foot of the Crag talus, and thus acquired its staining and embedded sand grains, and given the impression of being genuinely in situ in undisturbed Crag deposits several hundred years later. Notwithstanding any present day doubts, Stopes’ conviction of its authenticity fuelled his collecting zeal for the rest of his life, and, most importantly, provided the necessary preconditions for his subsequent embracement of Benjamin Harrison’s work and Eolithic cause.

HENRY STOPES’ FLINT COLLECTION

“The abundance of so many natural forms was quite uncalled for”

(Smith 1918: 35)
this point it was crudely estimated as perhaps containing 60,000 to 70,000 objects by Reginald Smith, of the British Museum, who was seconded in 1918 to examine the collection on behalf of its new owners who had paid £30,000 for it at today’s prices. According to Smith’s report to Dr. Hoyle, Director at Cardiff: “You did right to warn me that an examination of the Stopes Collection would be no light undertaking” (Smith 1918: 35), and it was never fully unpacked or quantified; although Smith performed an initial sort of the majority of the collection, a number of boxes “which appeared to be of minor importance [were] left for some future occasion” (ibid.).

One of the main features of Stopes’ collection is that from the beginning he kept a relatively detailed catalogue, transcribed by his daughter Marie when he moved from Swanscombe (M. Stopes 1898). Each item was assigned, and marked with, an identifying number, and in the Catalogue he recorded details of how/where he obtained it, and sometimes when, along with a short description. Each identifying number relates not to individual items, but to localities or sources, so all items sharing the same provenance were given the same number. Some entries are rather vague, with details of the vendor or the country of origin; but others are remarkably specific, with site locations and specific stratigraphic contexts (Figure 4).

The earliest dated entry in the catalogue is a ground flint celt, collected from Stopes’ native Colchester in 1876 (No. 242); the last entry (No. 764a) was collected by his wife Charlotte after his death, on a trip to Rickmansworth to try and identify the true provenance of a particularly fine handaxe she had found in a gravel consignment used for road building on Hampstead Heath. The intervening entries, comprising almost
entirely lithic artefacts (as well as several thousand eoliths), range from across the world, and from the earliest period to recent ethnographic examples. Obsidian pieces from Easter Island are sandwiched in the Catalogue between eoliths from East Dean, Sussex and handaxes from "the great gravel pit, Milton Street". Other entries cover: American Indian arrowheads from Ohio and Dakota; pieces from "within 6 or 7 miles of Bellary Town, Madras"; 350ft down Geelong Mine (South Africa); Cairo; Jerusalem; Rhode Island; New Guinea; etc. Comparison of entry no. against date proved instructive (Figure 5). Until 1892, there is no trend; after that point, coinciding with Stopes’ move to Swanscombe, there is a burst of collecting activity that starts to decline in c. 1895, before coming to a halt after 1900, when Stopes’ health began to fail.

Alongside the more exotic entries, there are more numerous entries from the British Isles, particularly from Kent, and it is through this that I first became aware of Stopes’ collection, ultimately as a result of Roe’s pioneering trawl through forgotten museum collections across the country. Although: “in the case of the vast Stopes collection...only a part has been examined in detail...No numerical estimates have been attempted” (Roe 1968: v), sites mentioned in Stopes’ catalogue were included by Roe in his county listings. Background research in advance of housing development at Ingress Abbey, Greenhithe (cf. Capon 2009) led to Roe’s (1968: 163) entry for Embleton’s Garden, Ingress Vale, and ultimately to the National Museum of Wales’ basement, where several hours of search by Elizabeth Walker through dusty crates, many apparently untouched since packed by Reginald Smith in 1918, had revealed one rather pathetic rolled handaxe, representing Catalogue No. 751 “found by Winnie Stopes in Embleton’s garden at Ingress Abbey, old garden.”

This exercise did, however, identify the collection and its catalogue as: (a) of potential unrealised importance; and (b) a continuing embarrassment in its present state to the National Museum of Wales (cf. Wymer 1978). There was evidently a substantial job to be undertaken collating the numerous duplicate references in the Catalogue to the same sites under slightly different names, and in carrying out some detective work to identify sites not clearly named, but for which various locational clues were given. Furthermore, Roe’s work had not involved any analysis of the lithic material, associated in some instances with specific horizons, so a basic technological appraisal of the associated lithic material for each catalogue entry was also overdue, as previously recommended by Wymer (ibid.) who had found that “contrary to ideas based on recollections of my previous visit, the collection is in the main well worthy of preservation.”

These tasks were carried out in 2003, as the Stopes Palaeolithic Project, supported by the Aggregates Levy Sustainability Fund. The project focused upon the Kent entries in Stopes’ catalogue, since this was his main collecting area, where he provided most contextual detail and was most likely to have
identified new sites. This was also an area earmarked for rapidly expanding infrastructural and urban development, so there were clear curatorial, as well as academic, benefits. The full report (Wenban-Smith 2004) is accessible online through the Archaeology Data Service (ADS) so the full results are not reiterated here. There proved to be 175 Kent entries in the catalogue, representing 92 sites (Table 1), the great majority being in the Swanscombe and Ightham areas, and more than 24,000 items (Table 2; Table 3), including more than 5,000 handaxes of which 4,000 came from the Great Pit, Milton Street, Swanscombe, later known as Barnfield Pit (Smith & Dewey 1913; Conway et al. 1996).

Many of the sites identified were not previously on the curatorial radar, a particularly important discovery being the location of Bevan’s Wash-pit (Catalogue no.s 14, 27, 543 and 598) located (TQ 61020 73520) in the heart of the development area around the Ebbsfleet International Station, and source of more than 20 handaxes; it later became clear that this pit is obliquely referenced by Spurrell (1890: cxlv) as “another [pit] on the same side of the stream, by the side of the road, near by”. However, what was initially baffling was the presence of more than 4,000 wholly natural pieces of flint. Even Reginald Smith, a believer in eoliths, commented (1918: 35): “the accumulation of so many natural forms was quite uncalled for”. This is explained to a certain extent by Stopes’ published declarations of his working methods:

“Every stone I see...is carefully examined. If it shows any sign of use it is kept. If entirely distinct from others, it is placed in a position where it is brought under my notice very frequently...Eventually more turn up, showing clearly the purpose for which the type was used”

(H. Stopes 1901: 300)

Furthermore:

“By implement should be meant every stone used [sic — Stopes’ emphasis in original text] to facilitate man’s action, not necessarily made or shaped for use, but used [sic — Stopes’ emphasis, as before], indication of use being determined by wear, in conjunction
Period | Accurately located | Estimated location | Generally located | Unknown location | Total
--- | --- | --- | --- | --- | ---
Both Palaeolithic and Late Prehistoric | 11 | 10 | 17 | - | 38
Palaeolithic only | 7 | 1 | 1 | 1 | 10
Late Prehistoric only | 3 | 4 | 11 | 2 | 20
No material surviving | 5 | 6 | 12 | 1 | 24
Total | 26 | 21 | 41 | 4 | 92

Table 1: Identification of Stopes’ Kent sites, and survival of material of different periods in his collection

Assemblage size | Pal | Late P | Nat | Forged | Ethno | Misc | Total
--- | --- | --- | --- | --- | --- | --- | ---
1,000–10,000 | 1 | 1 | 1 | - | - | - | 3
100–1,000 | 3 | 8 | 8 | - | - | 7 | 12
10–100 | 17 | 21 | 14 | 1 | - | 8 | 43
1–10 | 28 | 30 | 33 | 2 | 2 | 11 | 76
0 | 43 | 32 | 36 | 89 | 90 | 76
Total assemblages | 49 | 60 | 56 | 3 | 2 | 26 | 262
Total no. artefacts | 11,427 | 6,093 | 4,156 | 23 | 3 | 2,499 | 24,201

Table 2: Stopes Collection assemblage sizes and artefact counts for different periods [Pal: Palaeolithic; Late P: Late Prehistoric; Nat: natural flints; Ethno: ethnographic artefacts; Misc: miscellaneous others]

Assemblage size | Ha | HaF | C | F-t | Deb | Perc | Misc | Total
--- | --- | --- | --- | --- | --- | --- | --- | ---
1,000–10,000 | 1 | - | - | - | 1 | - | - | 2
100–1,000 | 2 | 1 | - | - | 2 | - | - | 5
10–100 | 9 | 3 | 2 | 3 | 7 | - | - | 15
1–10 | 23 | 8 | 8 | 5 | 27 | 4 | 2 | 51
0 | 14 | 37 | 39 | 41 | 12 | 45 | 47 | 157
Total assemblages | 35 | 12 | 10 | 8 | 37 | 4 | 2 | 92
Total no. artefacts | 4,584 | 758 | 103 | 106 | 5,866 | 8 | 2 | 11,427

Table 3: Technological breakdown and quantification of Stopes’ Palaeolithic assemblages [Ha: core-tool handaxes; HaF: handaxes on flake blanks; C: cores; F-t: flake-tools; Deb: débitage; Perc: hammerstones; Misc: miscellaneous others]

His daughter Marie also recalled:

“Father collected in a way that had never been seen before. He didn’t merely buy the best specimens…he went to the pits himself, often taking the whole of his family…and we searched for days at a time…We brought home to his collection not only the best and handsomest axes but all the scraps of stone which showed any sign of human workmanship”

(H. Stopes 1895: 325)

It is evident from Stopes’ regular brief reports, buried in the obscurity of the British Association proceedings (e.g. H. Stopes 1894), that he believed in, and collected, Eolithic implements, and that he was also in touch with Benjamin Harrison, well-known as one of the central figures of this debate (Harrison 1928; O’Connor 2003; McNabb, this volume). However, what has become clear from the copious correspondence between Stopes and Harrison preserved both in Maidstone Museum and the Harry Stopes-
Roe archive, is that Stopes was not merely an associate of Harrison and a participant in the Eolith debate of the late 19th and early 20th centuries. He was a vigorous and vociferous proponent of the Eolithic cause, and the close friend, mentor and confidante of Harrison. Not only that, but, despite the eminent Prestwich’s support, Harrison could even have lost his faith in his Eolithic cause without the encouragement of Stopes, driven by his own need for vindication of Tertiary Man.

STOPES AND HARRISON

Stopes entered Harrison’s life unannounced in late August 1892, calling as many did on his shop in Ightham, the village grocery and general store: “Mr Stopes called...bought forth an unmistakeable eolith from Norwood. Accepted same, he much interested. Encouraged me to keep on. Felt sure of my case — kept on...” (HSR-5). Shortly after, Stopes wrote the first of many hundreds of letters between the two men:

“I was greatly interested in your collection and permit me once more to thank you for your kind hospitality...I shall be very happy to have a field day with you, and if next Sunday may be convenient ...we may have a good ramble in the fields together...You happen to be singularly placed [and] the inevitable outcome of your toil and careful study...must be that you will have it in your power to throw much light upon this most interesting subject...No sane being can doubt that the vast majority of the stones stored by you have been worked by men and used in various ways...I should not be at all surprised if in continuing your study and research, you secure evidence in your immediate neighbourhood of preglacial man in such form that no scientific man who is truly scientific could reject...I think you have done exceedingly good work in the past, I believe you will do still better work hereafter. Yours faithfully, H. Stopes.”

(HSR-6: letter from H. Stopes to B. Harrison, 1st September 1892)

The following ten years were marked by numerous field outings, sessions re-examining and cataloguing both men’s flint collections, the posting back and forth of key finds and relevant academic books and papers, and the sometimes daily exchange of letters. Harrison, despite having the most appalling handwriting as many commentators have noted, not least his own son: “I agree as to the difficulties of my father’s handwriting” (HSR-7), was a prodigious letter-writer. He also, much to the benefit of future investigators, was in the habit of copying out letters to and from him by hand, and passing them on in his correspondence to others. It is clear that Stopes had a galvanising effect on Harrison at a critical juncture, as the “raging vortex” (cf. O’Connor 2003) of the Eolithic storm developed following Prestwich’s (1889, 1891, 1892) publications:

“Our visit...stimulated me to renewed exertions [and] has been productive of great good, it has called forth latent strength and made me work with a will and to good purpose, because one feels confident of the truth...”

(HSR-8: letter from B. Harrison to H. Stopes, 31st January 1893)

Like in any close relationship, there were tiffs and misunderstandings. However, these were always quickly overcome. Both men shared the mutually reinforced conviction that they were blessed as the chosen agents of enlightenment in the battle to convince the world, and initially the English academic establishment, of the presence in England of Tertiary Man, extending the antiquity of Man beyond the period of the great glaciation of East Anglia, and even (in their wilder moments) arguing for the Kentish plateau as the cradle of the human race. Evidence was adduced in the form of flint implements, subsequently christened “eoliths” by Brown (1893). These, as indicated above, did not just include artefacts
showing, or thought to show, traces of working and shaping, but stones merely showing alleged traces of wear, or even just having a form interpretable as having been used.

There is no need to repeat here the minutiae of the arguments for and against eoliths as being of human origin, and the debate over the equally crucial matter of their geological provenance (cf. McNabb, this volume). The war was waged through the 1890s, particularly in the discussions of Section C (Geology) and Section H (Anthropology) of the annual British Association meeting. Throughout this period believers were probably in the majority, and Stopes and Harrison were continually convinced that their case was almost won. However, there was always a rump of doubters, led by the “little St. Thomas” Sir John Evans and Boyd Dawkins (E.T. Newton 1897); the battles that turned the war for the doubters were probably the early 20th century papers of Boule (1905) and Warren (1905), although skirmishes continued through the 1920s and 1930s (e.g. Moir 1924, 1927), and even persist in the present day on the wilder fringes of academic discourse and the hinterlands of the internet. However, Stopes did not himself live to see his hopes dashed, retaining throughout the remainder of his life the convictions expressed early in his relationship with Harrison:

“I have little to add...other than heart-felt congratulations on the probability of your life-work being of real value to humanity...A right understanding of the truth...is after all more worthy of attainment than any empty honours “courtiers” may gain...it has sometimes come to us to be leaders of thought, to be discoverers of truths...I am firmly convinced that you will be fortunate in living long enough to see the truths you have fought for accepted.”

(HSR-9: letter from H. Stopes to B. Harrison, 14th July 1893)

The feeling was mutual. The last words here should be left with Harrison, who wrote to Stopes’ widow Charlotte, in two letters shortly after his death:

“He so well grasped the significance of my Plateau rudes and spoke out like a prophet. Not a hesitating namby-pamby time server like some of the so-called big guns.”

(HSR-10: undated letter from B. Harrison to C. Stopes, c. 1903–1904) and:

“I was very, very proud of Mr S’ first letter...There are more about in many hundreds in my stores [of letters]...They acted as a stimulus to me and encouraged me to persevere, notwithstanding the long delay of Evans, the insolence of — [Here Harrison has inserted a long dash; it seems likely he was thinking of Worthington Smith, cf. Roe 1981: Plate 5]. I venture to think I have done a work which will live and he [Sir John Evans] has treated with contempt...”

(HSR-11: undated letter from B. Harrison to C. Stopes, c. 1903–1904)

**SWANSCOMBE RESEARCHES: DIERDEN’S PIT, INGRESS VALE**

Besides his work with Harrison on the Kent plateau, Stopes investigated many sites in the Swanscombe area. As previously mentioned, he accumulated a huge, and unselective, collection from Barnfield Pit, which, despite being unprovenanced to specific horizons, could be usefully re-examined today to explore the full diversity of handaxe typology in the Lower Middle Gravel, from which the vast majority of this part of his collection undoubtedly came. He made a large collection from the pit at Galley Hill, thought by many at that time to have produced a human skeleton of early Palaeolithic age (E.T. Newton 1895); although apparently Stopes himself was sceptical according to his wife’s later memory: “Your father would have liked to
have believed in it, but he could not be sure, from the enquiries he made...” (HSR-12: letter from C. Stopes to M. Stopes, 20th January 1913). He made the main surviving collection from the Globe Pit, Greenhithe, which despite having a complex (and poorly recorded) provenance (although see Dewey 1932), demonstrates a predominance of handaxe types quite distinct from the median type of the Lower Middle Gravel, and thus hints at a different phase of occupation in the area, further discoveries of which should now be a priority. There are also numerous tantalising references in his surviving archive to other discoveries, for instance: “I went yesterday to Ightham, walking thence to Swanscombe whence the men had sent a telegram that they had unearthed a splendid tusk” (HSR-13); shortly followed by: “The tusk is a very large one & several of the bones are enormous” (HSR-14).

Dierden’s Pit, Ingress Vale became, however, the focus of the last part of Stopes’ life. He stumbled upon Dierden’s (also spelt “Dearden” by many) small gravel working in Greenhithe, on the north-western side of Swanscombe, on 27th April 1900 (Figure 6), and discovered that: “the workmen had cut into a deep and exceedingly fossiliferous band of stratified sands and gravels” (H. Stopes 1900a: 302). From a so-called “shell-bed” 10 ft thick, resting on Chalk bedrock at 78 ft (23.80 m) OD, and overlain by 4 ft of non-fossiliferous sediment, he obtained numerous flint artefacts in association with mammalian fossils and molluscan remains. He immediately regarded the site as of prime importance for its rich fossiliferous, and particularly molluscan, content including several extinct species. With remarkable rapidity, he processed a bulk sediment sample and obtained (from A.S. Kennard) identification of the molluscan remains, and was reporting the discovery and a preliminary faunal list to a meeting of the Anthropological Institute less than 3 weeks later (ibid.). Further processing and identification followed, and later reprints of the same paper give (confusingly for modern students) a much more extensive faunal list including small rodents, fish, reptiles and 45 mollusc species, seven of them extinct in Britain.

On paper, Stopes (1900a, b) seems to have regarded the main importance of the site as confirming the Pleistocene age of the high terrace gravels of Swanscombe (occurring between c. 80 and 100 ft), which had produced so many Palaeolithic artefacts at the Great Pit, Milton Street; this was not in great doubt however, as the Great Pit gravels were already known to contain extinct fauna, as well as the height of the terrace being accepted as indicating a very ancient precursor of the Thames. He also argued that the Dierden’s Pit material had bearing on the age of the gravels at similar height at the nearby Galley Hill Pit, and consequently upon the age of the human skeleton reportedly from that pit (E.T. Newton 1895); again, however, the age of the gravels was not greatly disputed: the main point of debate concerned whether or not the skeleton was reliably associated with the gravels. So one might wonder why Stopes was so excited by his shell-bed on anthropological grounds, as opposed to palaeontological. However, W.M. Newton’s (1901) paper and that posthumously presented by Stopes’ wife Charlotte to the 1903 British Association meeting at Southport (C. Stopes 1904) are more informative as to Stopes’ likely thinking.

Both papers emphasise the occurrence of high numbers of extinct species, indicating a greater age than thought for Man’s antiquity, and for the Swanscombe gravels, including some species “suggesting a closer relation to Pliocene beds than have previously been found in the Thames Valley” (W.M. Newton 1901: 81); and both also emphasise the co-occurrence of “rude implements” (i.e. eoliths) with better worked forms. Newton in particular, with whom Stopes was on very friendly terms and exchanged numerous letters, elaborates on the Dierden’s Pit deposits as containing older derived
Figure 6: Dierden’s Pit, Ingress Vale, probably in May 1900 [HSR-15]

Figure 7: Locations of: (a) Dierden's Pit; and (b) the plot of land purchased by Astor for Stopes to excavate [Base map OS 1:2500 survey, 3rd edition; © Crown Copyright and Landmark Information Group Limited 2009; all rights reserved 1905]
implements of “more primitive form” along with natural stones “exhibiting signs of much use” gathered from the Weald plateau (ibid.). Thus it seems that Stopes’ reading of the site was not so much for the expanded interpretive potential of the rich faunal evidence in terms of climate and local environment, nor for the unprecedented predominance of ovate forms, many with a twisted profile (in contrast to the typically pointed forms from the Milton Street Pit), as drawn attention to by W.M. Newton (ibid.), but as another front in the war for acceptance of pre-Palaeolithic Tertiary Man on the Kent plateau.

Whatever Stopes’ main motivations, and he can be forgiven for missing what we would today regard as important aspects of the site, notwithstanding his inability to move beyond his Tertiary agenda, he correctly identified the rich faunal remains at Dierden’s Pit as of high importance for confirming the date of the deposits, and by association, the date of nearby deposits thought to be equivalent. Already sensitised to the irretrievable loss of Palaeolithic evidence accompanying the exploitation of aggregates in the Swanscombe vicinity — “The removal of ballast, the use of concrete...cause this demolition to continue with ever-increasing rapidity...[This] daily destruction and removal, without record...is one of the saddest blots upon the proud escutcheon of science in the Victorian era” (Stopes 1895: 325) — Stopes publicly urged all “students and collectors” urgently to fill their boots at Dierden’s Pit as promptly as possible, since: “The deposit is of limited extent, and...is being rapidly removed, and will speedily disappear” (Stopes 1900b: 93).

A number of collectors appear to have followed up this invitation. As well as Stopes’ own collection, held at the National Museum of Wales, artefacts from the site originating from a number of private collectors — Corner; Newton; Kennard; and Warren — are preserved in Dartford Museum and the British Museum (Wymer 1968: 333). However, Stopes had bigger plans. In December 1901, the plot of land adjoining Dierden’s pit (Figure 7) was advertised for sale by Rayner & Bridgland, land agents of Gravesend (HSR-16). In January 1902, Stopes wrote direct to the American millionaire William Waldorf Astor at his private residence in Carlton House Terrace, one of London’s most exclusive addresses:

“I wish to enlist the sympathy of a wealthy man, for a purely scientific object, where a small outlay...can directly help scientific research. I appeal first to you. The most intensely interesting plot of land in Gt Britain is shortly to be sold in small building plots...and I ask you to become its owner...Then, please permit me to extract from it all the facts it contains relating to the early history of man in the Thames Valley...had I the means, I would buy it, but I have not. I have been a scientific worker for many years to my impoverishment. For 10 years I have been looking for the evidence this land can give, and it is there without any possibility of error. No other spot in Britain has yielded so much evidence as I have already found in only a small part of it...if prompt action be not taken, it will be lost to science for ever.

“The total outlay is under £1,000...I will do everything in connection with it without remuneration, other than the right to work the top surface, and to retain the worked flints now resting in the gravel. The shells and bones I do not want, but you would win eternal fame by giving, or permitting me to give, in your name sets to the British Museum, Royal School of Mines...and also selected University Museums in this country, America and Europe.

“...if you will do as I suggest, there will be no other spot in Europe so much discussed. Many of our best Geologists, Anthropologists and Palaeontologists already admit this to be the most important discovery affecting our knowledge of early
man, since the establishment of primitive man in the gravel of the Somme, in France.

“May I crave the favour of an interview when I can explain more fully? Would you care to meet me at my house in Hampstead, where you can see the things found and a collection of 100,000 stone implements? Or may I attend any place and time you may be good enough to appoint?

“Again craving your forgiveness should the matter not meet with your approval. I remain, Sir, Faithfully yours, H. Stopes”

(HSR-17: letter from H. Stopes to W. Astor, 27th January 1902)

Stopes’ targeted benefactor was well-chosen. Recently naturalised as an English citizen, Astor was firstly extremely wealthy, but more importantly had a passion for art and sculpture, and was evidently keen to embrace the cultural life of his adopted country. Acting with decisiveness and rapidity, he immediately instigated a 3-man committee drawn from senior staff of the British Museum (Charles Read), the Natural History Museum (Arthur Woodward) and the Anthropological Institute (Frederick Rudler) to advise him on the scientific value of the proposed project. Having received a favourable report (Natural History Museum archives: letter from C. Read to A. Woodward, 24th February 1902), and tweaking his agreement with Stopes to ensure that Eton College Museum also received a dividend in the form of a representative artefact and fossil series, he gave Stopes the go-ahead in late February 1902.

Then followed one of the great Tragedies of anthropological endeavour. Despite immediately agreeing to meet the asking price, it took until June for the sale to be agreed, following further wrangling over price with the Associated Portland Cement Manufacturers (APCM) Ltd, who it transpired were the vendors, and an attempt by them to restrict the sale to Leasehold rather than Freehold. The sale then seemed set to proceed, but legal formalities dragged on throughout the summer. At the same time, unknown to Astor and his agent John Adams, with whom Stopes was dealing, Stopes’ health was failing. In June he undertook a trip to Hungary, ostensibly a fact-finding mission with a delegation of Essex farmers as guests of the Hungarian government, but in fact a change of scene to help his health. However, the trip seems to have been counterproductive, with the Hungarian summer heat and travel meaning that he returned feeling worse than when he left. By August, several letters refer to his very poor health (HSR-18; HSR-19).

At this point he still dreamt of carrying out his work at Dierden’s, and endeavoured, with the support of Adams, to get access. However: “I am afraid you cannot take possession of the land yet…I find to my surprise that it is let on a yearly tenancy to Dearden” (HSR-20). The vendors then undertook to cancel the tenancy, which they had initially promised could be quickly done, but: “Dearden built 2 corn stacks upon the land y’day so it does not look as if he contemplated giving up at once” (HSR-21). Completion of the sale continued to be delayed through September “in consequence of the property being so charged with encumbrances” (HSR-22), and whilst APCM paid lip service to the principle of allowing Stopes prior access, it was without evicting Dierden and his “stacks [&] piles of rubbish old carts etc with which the land is now encumbered” (HSR-23). Meanwhile, early in September, Stopes had written to his wife: “It seems futile if not foolish for me to try to look ahead...I feel as if I were gaining flesh. The hole in my left lung seems also to have healed...But I do not gain strength” (HSR-24). Both situations reached their crises in October:

“I can do nothing more to get you possession until completion takes place...As to this I fear we shall have to resort to litigation...If you are writing to Apps [the APCM}
representative] tell him our patience is quite exhausted”
(HSR-25: letter from J. Adams to H. Stopes, 8th October 1902)

Shortly after, Stopes finally confessed to Adams:

“The delay has caused loss of time and opportunity that I fear is irrecoverable. My throat has developed tuberculosis & I am seriously ill. I have thought very anxiously & gravely about the proper course to pursue...It may be that I shall be glad to give my whole time to exploration...or there is the other fear that I can only patiently await the end.”
(HSR-26: letter from H. Stopes to J. Adams, 23rd October 1902)

To his credit, Adams, with whom Stopes seems to have developed a rapport early in their relationship, immediately responded with expression of great sympathy and reaffirming his commitment to purchasing the land:

“I am exceedingly distressed to receive your letter of yesterday’s date...Surely...there can be no doubt of your ultimate cure...If open air treatment is prescribed for you, what more delightful occupation can you have than to superintend the exploration of this land?”
(HSR-27: letter from J. Adams to H. Stopes, 24th October 1902)

After this point, events began to move. Completion was agreed for 6th November, and Adams sent a clerk on the 7th to Stopes’ rented accommodation in Greenhithe, just round the corner from Dierden’s pit, from where he could probably see the site out of his bedroom window, and presented him with the deeds for him to sign and take ownership. Stopes’ last written words were to Adams:

“Dear Mr Adams, I duly rec’d visit from your clerk & signed deeds...I am sorry I am not well enough to give much attention to this just now but as soon as I am better will make up. I am sorry it has already been so much trouble. Truly yours”
(HSR-28: letter from H. Stopes to J. Adams, 8th November 1902)

Stopes died less than four weeks later, in his rented Greenhithe room, with Mrs Margaret Garnett, his ex-housekeeper from his Mansion House days, in attendance. Following his death, Astor tried to get one of Stopes’ contemporaries to follow through with investigating the site, but none would, and Astor then sold the site for development without any investigations having taken place (HSR-4).

The evidence from Dierden’s Pit and its shell-bed deposits remains enigmatic to this day. The handaxes in Newton’s collection from the site are mostly twisted ovates and cordates (W.M. Newton 1901), quite distinct from those remaining in Stopes’ collection, which are of typical Lower Middle Gravel form (Wenban-Smith 2004: Appendix 3, Catalogue no. 65). Later investigations by Smith & Dewey (1914) recovered, from deposits they regarded as part of Stopes’ shell-bed, only flakes similar to the series (later christened Clactonian) from the Lower Gravel at Barnfield Pit, leading them to equate the Dierden’s Pit shell-bed with the basal phase of the Barnfield Pit sequence (Lower Gravel and Lower Loam). However, this is incompatible with the range of Rhenish mollusc species in Stopes’ shell-bed assemblage, which, as emphasised by Kerney (1971), would indicate equivalence with the middle phase of the Barnfield Pit sequence (Lower Middle Gravel and Upper Middle Gravel). One can only conclude that there is (or was) unrecognised stratigraphic complexity in the vicinity of the site, with investigators dazzled by the spectacular faunal preservation into inadequate stratigraphic recording and mistaken correlation of different fossiliferous horizons. Re-investigation of any surviving deposits under the rigour of modern methods
must be a priority if the opportunity arises.

CONCLUSIONS

Stopes emerges superficially as an archetypal Victorian male, embedded within, and contributing significantly to, the industrial, commercial and intellectual gold-rush of the era. His wealthy professional and Quaker background gave him an excellent education and a commercial niche, of which he took full advantage. Prospering initially, he then fell victim to the harsh Darwinian realities of Victorian capitalism, ending his life penniless in a rented room having spent his fortune on flints (and incidentally, an extensive library of rare antiquarian cookery and brewing books, although these were to a certain extent professionally justifiable). He was without doubt capable and dynamic, a fluent and persuasive public speaker, driven to work unstintingly at both his professional and antiquarian endeavours and to take leading organisational roles whenever possible. However, as with Captain Ahab, there seems to have been a special lunacy lurking within; his collecting passion and his obsession for his own White Whale of Tertiary Man stormed and carried any common sense instincts for financial security for himself and his family. A similar quixotic spirit underpinned his willingness, and indeed his urgent and uncontrollable desire, to put his head above the parapet in the Pure Beer debate, regardless of the inevitable consequences — attributes that later re-emerged in the campaigning zeal of his daughter Marie (Hall 1977).

Personal psychology and Victorian history aside, is there an academic legacy of Stopes’ anthropological work? I believe so. The detailed record of his Catalogue is a miniature Sites and Monuments Record in itself, listing numerous locations of Palaeolithic and Late Prehistoric lithic finds, that may reflect archaeological remains to take account of if/when any development takes place. He discovered, and drew attention to the potential of, the deposits at Dierden’s Pit, which as discussed above provide conundrums relevant to today’s research. Who can say what would now be our understanding of the Lower Palaeolithic in the key Swanscombe area if Stopes had lived even one more year to implement his investigations? Perhaps more importantly, he anticipated to an uncanny degree today’s conflicts between Palaeolithic heritage and development, bemoaning the unrecorded daily destruction of the remains of the remote past preserved in gravel bodies, and begging the Society for the Preservation of Ancient Monuments “to take cognizance of this” (H. Stopes 1895), a battle still being waged exactly 100 years later (Wenban-Smith 1995). Finally, Stopes exemplified the private passions that drive development of any subject. He was not neutrally engaged in an academic sideshow, but totally committed in service of both his own needs and, as I’m sure he would have argued, for the good of wider society and general scientific progress, in investigation of one of the great issues of the day, the origin of humanity. Stopes was above all, he claimed, a seeker after truth: “I shall be content so long as the truth be found” (1887); one doubts, however, he could ever have let go of Tertiary Man.

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grandparents, but generously loaned the whole lot to me to facilitate prolonged study; I hope the results are worthwhile.

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HSR-6: letter from H. Stopes to B. Harrison, 1st September 1892.


HSR-8: letter from B. Harrison to H. Stopes, 31st January 1893.

HSR-9: letter from H. Stopes to B. Harrison, 14th July 1893.

HSR-10: undated letter from B. Harrison to C.C. Stopes, c. 1903–1904.


HSR-12: letter from C.C. Stopes to M.C. Stopes, 20th January 1913.


HSR-14: letter from H. Stopes to C.C. Stopes, 6th April 1899.

HSR-15: Black-and-white photographic print; unlabelled, but recognisable as one of a group taken in a small quarry with identical sediments to the shell-bed sequence on 10th May 1900, one of which is marked on the back by Marie Stopes: “Henry Stopes on the site, Swanscombe”.

HSR-16: newspaper cutting of advertisement in the Gravesend Reporter, 7th December 1901.

HSR-17: letter from H. Stopes to W. Astor, 27th January 1902.

HSR-18: letter from H. Woodward to H. Stopes, 8th August 1901.

HSR-19: letter from J. Adams to H. Stopes, 22nd August 1901.

HSR-20: letter from J. Adams to H. Stopes, 15th August 1901.


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