

Society of Antiquaries of Scotland

The Scottish Antiquarian Tradition: Essays to mark the bicentenary of the Society of Antiquaries of Scotland 1780-1980

Edited by A S Bell

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Erratum

In the original publication of *The Scottish Antiquarian Tradition* plate 4 'Sir George Steuart Mackenzie, 7th Bt, of Coul' was attributed to Sir John Watson Gordon. However it is now attributed to Sir Henry Raeburn.

Scottish Archaeology in the Second Half of the Nineteenth Century

D. V. Clarke

This contribution is not concerned to chart the history of the Society of Antiguaries of Scotland in the period under review. Rather it seeks to examine some of the broader trends which underpinned the activities so liberally documented in the Society's Proceedings. Archaeological writings, then as now, have never contained a large number of essays which were intended to provide a theoretical basis for the subject; theory and methodology are, of course, implicit in the numerous available pieces of description and analysis but they seldom receive any treatment in their own right. In trying to tease out these underlying beliefs and the approaches to which they gave rise, I have perhaps been unduly reliant on the few explicit statements which are available to us. Nevertheless, such statements do provide a yardstick by which to measure the achievements of those not given to theorising on their own account, as well as indicating the overall goals which no single person could by himself hope to achieve. We cannot, however, totally ignore the organisational basis and the changes that were taking place if we wish to understand the theoretical developments.

Throughout the second half of the nineteenth century the Society dominated Scottish archaeology through its *Proceedings*, its management of the National Museum and its other activities, most notably the Rhind Lectures. This may seem so self-evident as to be unworthy of comment, but to adopt such a view is to ignore the fact that this represents a situation which made Scottish archaeology significantly different from its English counterpart in organisational terms. Prior to the 1840s there were only three societies in Britain with the principal aim of furthering the study of antiquities, namely the Society of

Antiquaries of London (founded 1717), the Society of Antiquaries of Scotland (founded 1780) and the Society of Antiquaries of Newcastle upon Tyne (founded 1813), which maintained some semblance of activity. There were of course other groups, in particular the literary and philosophical societies, which included antiquities within their ambit, but their contribution was at best spasmodic. This pattern changed quite dramatically in the 1840s with the foundation of the first of the county societies. The first sign of challenge to the dominance of the established societies was the formation in 1843 of the British Archaeological Association. It grew out of the belief among its leading members that the practices and procedures of the Society of Antiguaries of London were both inadequate and outmoded for the proper development of archaeology, and it took as its model the newly established and highly successful British Association for the Advancement of Science.¹ Internal dissensions among the leadership of the British Archaeological Association led within a few years to the formation of a second society, the Archaeological Institute of Great Britain and Ireland,² but both organisations were firmly committed to breaking with the metropolitan-based nature of the London Antiquaries. This split probably ensured that neither society could successfully challenge the primacy of the Society of Antiquaries of London. The intention was plain enough, however, and was to be realised by harnessing the provincial enthusiasm being shown by the formation of county archaeological societies. Such societies began to appear in the late 1840s and new foundations continued throughout the nineteenth century.

Some of the more important factors behind this growth in local archaeological societies have been reviewed by Piggott,³ who particularly emphasises the role of the Cambridge Camden Society, developments in geology, and the influence of Sir Walter Scott's historical novels. There can be no doubt that by the 1840s a sympathetic climate of opinion existed for the study of the past and more particularly for the material remains of the past. This new attitude developed, thought Haverfield, 'along lines characteristic of the early Victorian age through the formation of societies'.⁴ Not everyone shared the optimism shown by the founders of these societies: Lord Lincoln, then first Commissioner of Woods and Works, informed Peel in February 1844 that he believed that the antiquarian societies 'which exist have done, and I believe can do, very little good'.⁵ However, most were more positive in their attitudes and sensed a real change in feeling: 'I am quite sure,' wrote Hibbert Ware to an unknown correspondent. that even with moderate exertion the Society [of Antiquaries of Scotland] can be revived, for there is now a growing taste for the subject of Antiquities.⁶ Hibbert Ware's view is particularly interesting in that he clearly felt that 'the growing taste for the subject of Antiquities' was to be found in Scotland as well as in England. Yet there was not the same upsurge in local societies in Scotland: indeed they are conspicuous by their absence. This is not a point which Piggott discusses in any detail but he clearly believes that county societies were the product of areas with a strong attachment to the Anglican church and 'an argicultural and squirearchical background'.7 Nonconformists apparently did not have the same urge to study the past, and in Scotland the lack of a strong Anglican presence, combined with the previous wholesale destruction of medieval church fabric, rendered it wholly unsuitable ground for the formation of local archaeological societies. It is difficult to accept this interpretation when one attempts to reconcile the dates of foundation of local archaeological societies with the only reliable guide which we have to religious affiliation, the so-called Religious Census of 1851. The value of the information collected during the census was hotly disputed at the time but more recent assessments suggest that it was a conscientious compilation with substantial reliability within its own limits.⁸ Certainly it offers little support for Piggott's view, which at best provides only a half-truth in explaining the Scottish situation. An important factor must have been the size of population relative to the very considerable area of the country, something which even today still retards the development of local archaeological societies. Of the societies which did get established, all were in southern Scotland, either in areas where there was a sizeable concentration of population, for example Glasgow, or where events in northern England were easily known and consequently more influential, for example Dumfries and Galloway. Yet these isolated examples serve only to emphasise the essential fact that county societies did not become effectively established in Scotland. The situation was such a continuing source of weakness that Joseph Anderson, in cataloguing the shortcomings of local museums late in the century, felt that they could all benefit from 'the energetic co-operation of a local Society'.9

It might perhaps be tempting to regard the Society of Antiquaries of Scotland as the equivalent in effect of the large English county societies in much the same way as the Cambrian Archaeological Association

with its annual meetings at various localities throughout Wales can be so interpreted. But to do so would be, I think, a grave mistake. The Society did not seriously alter its manner of operation except in one important instance discussed below, and it certainly regarded itself as the society for Scotland, with pretensions and status wholly comparable to that of the Society of Antiguaries of London. This was moreover a view shared in some part by others: in 1844 David Findlay wrote to Alexander Smellie announcing the intention to form an antiguarian society in Glasgow and he continued, 'we will therefore feel much obliged by your favouring us with any suggestions or information which in your experience you may deem useful to us in the formation of such a society'.¹⁰ The fact that the Society had been in existence, however precariously, since 1780 was clearly an important factor in providing this sense of status. Certainly, the Society's past history seems to have given it greater stability than was achieved by the newly founded societies. If we compare the membership figures for the Society of Antiquaries of Scotland and the Surrey Archaeological Society in the second half of the nineteenth century, the contrast is particularly marked (fig.). The slow but steady growth enjoyed by the Society throughout the period has little in common, other than the maximum number of members, with the fluctuations experienced by the Surrey Society, a pattern wholly typical of the newer societies. The national character of the Society is most clearly seen in its dealings with the Archaeological Institute, which in its title at least was claiming an interest and perhaps ultimately a role in Scottish archaeology. Contact between the two societies began soon after the foundation of the Institute, and a letter from Albert Way to W. B. D. D. Turnbull indicates the positive stance adopted by the Society:

I am directed by the Central Committee of the Institute to request that you would take an early occasion of communicating their acknowledgement of sincere thanks for the important services and the encouraging demonstration of friendly feeling, on the part of the Society of Antiquaries of Scotland, which have been received at the recent meeting at York. The Central Committee would advert most gratefully to the kind liberality which has bestowed so valuable an addition to the curious exhibition at their museum at York, in the precious objects of Antiquity entrusted to their care, selected from the Collections of your Society and which they hope have been restored in perfect security. The Committee have also to express their warm thanks for the donation of the Transactions of the Antiquaries of Scotland, a most valuable accession to their Library, comprising so many memoirs and evidences of the highest interest, and utility in giving furtherance to their present endeavours. The Committee have to express, with no less hearty thanks their acknowledgement of the honour which has been done to the Institute, and the encouragement which they have derived from the requisition communicated on the part of the Antiquaries of Scotland, inviting the Institute to hold their annual meeting in Northern Metropolis, on an early occasion. The Committee entertained the earnest hope that at no distant period they may be able to visit a city, where not only so rich a field of Archaeological interest is open to them, but where they have the gratifying assurance of so hearty a welcome, as is afforded by the invitation which they have had the gratification to receive. The opening of reciprocal intercourse between the Society of Antiquaries and the Archaeologists of North Britain, and the Institute must conduce in an important degree to the furtherance of the common object.¹¹



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The invitation was not taken up for a further ten years, but when the Archaeological Institute finally visited Edinburgh,

It was a source of peculiar gratification to the Fellows of this Society to welcome to our city, - so rich in objects of archaeological interest - the members of an Association devoted to kindred pursuits, and to many of whom the science of the past is deeply indebted to the extent of their researches and the accuracy of their inductions. We could not but hail their visit as tending to give a fresh impulse to archaeological studies, not only by the prestige of their presence, but still more by the large diffusion of information respecting the objects and materials of antiquarian research to which their meetings and exhibitions could not fail to give rise . . . It is gratifying to know that the result more than surpassed our expectations; and it is with no ordinary pleasure that we now look back on the period of agreeable and profitable intercourse which we then enjoyed with our brethren from the south. We have reason to believe that the gratification was mutual, that not only were our visitors pleased with the attentions they received from Fellows of this Society, but that they rejoiced to find here so many who could meet them on equal terms in their favourite walk, and reciprocate the instruction and interest which they received.12

This description of the visit by one of the Vice-Presidents of the Society leaves no doubt that they received the Institute with no sense of inferiority, and that consequently any emphasis on the importance of the visitors served to underline the importance of their own society.

This awareness of new developments and changed times in the antiquarian world, reflected in invitations to such as the Archaeological Institute, did not lead to any significant change in the Society's procedures except in the field of publication. Taking as its model the volumes of Archaeologia published by the Society of Antiquaries of London, the Society had from an early stage in its history produced some volumes of Transactions, later named Archaeologia Scotica. Their appearance had, however, been very irregular, in marked contrast to the steady stream of Archaeologia produced by the London Antiquaries. Both serials were lavish productions intended to reflect the wide range of interests of the respective societies, and their format was firmly rooted in the topographical publications of the late eighteenth century. None of the newly emerging societies attempted to emulate the style of these volumes but all firmly announced their intention to publish a journal regularly. They were to contain reports on activities but, more important, articles and notes which represented the fruits of antiquarian labour in the society's area. Usually a modest octavo volume was produced, the format owing much to the growing periodical press. The use of this new size led to more efficient and rapid production,¹³ and if the older societies felt able to ignore most aspects of the new societies' activities, they did not adopt the same indifferent attitude in the case of publications. The new, small-style *Proceedings* of the Society of Antiquaries of London completed its first volume in 1849, and volume I of the *Proceedings of the Society of Antiquaries of Scotland* covered the three sessions 1851-1854. The London Antiquaries' production was rather a formal affair for the years 1843 to 1849, the first volume, and was originally produced to counter criticisms of the Society's management, but its introduction of woodcuts in 1849 can only be interpreted as a response to the publication efforts of the younger societies.¹⁴ The Scottish journal is best interpreted as an attempt to establish, in the face of the achievements of other societies, a more regular publication than had been possible with *Archaeologia Scotica*.

Of course, the value of such a journal to members residing at a distance from Edinburgh would have been largely nullified without an efficient means of distribution. This was provided by the recently reformed postal services: 'It is difficult' wrote Disraeli in Endymion (1880), 'for us who live in an age of railroads, telegraphs, penny posts, and penny newspapers, to realise how limited in thought and feeling, as well as incident, was the life of an English family of retired habits and limited means only forty years ago' - remarks which applied with greater force to Scotland.¹⁵ The penny post undoubtedly provided the most significant contribution to the postal system by bringing a previously expensive service into widespread use, but it was not by itself of considerable significance to archaeological societies, since the Post Office initially lacked the ability to deliver widely in rural areas. Seven hundred new posts were established, however, by 1850, and the general revision and improvement of country services, begun in 1851, was largely complete by 1858; by 1864, 94% of the letters were delivered to the houses to which they were addressed. Equally valuable was the introduction of a book post in 1848 with a reduction in rates from 1855.16 It is interesting to note, however, that the Society did not at first consider that their responsibilities extended to paying the postage. A printed billet of 1853 reads:

Members residing at a distance, who have not yet received their copies of the FIRST PART OF THE SOCIETY'S PROCEEDINGS, may have it forwarded by post, on sending 6 postage stamps to Mr. Wm M'CULLOCH, Assistant Librarian of the Society of Antiquaries of Scotland, 24 George Street, Edinburgh.¹⁷

A similar position was adopted by the London Antiquaries, but their

Scottish counterparts do not seem to have followed their example in having copies of their *Proceedings* printed on thin paper for posting to country members.¹⁸

These alterations in the accepted ways of presenting archaeological information, combined with the emergence of a considerable number of new journals, inevitably led to an increase in the available published material. Equally important was the expanded range of information now recorded in permanent form. Small excavations and chance discoveries, which would previously have lain unrecorded or at best been entrusted to a manuscript diary, began to appear in ever-increasing numbers in the pages of the county journals. The result was not only an explosion of information but also a change in the whole structure of archaeological publication, which became much less dependent upon the wealth of the author or patron or the whim of a publisher. Yet these quite fundamental changes were brought about by societies with wholly traditional aims which took little account of the implications of the new situation - 'an important object which this and Kindred Societies have in view is to supplement the older County Histories by a close attention to the details of parochial history'.¹⁹ They were not, however, blinkered in their attitudes, for there was an early and general realisation of the benefits of the exchange of publications between societies. Daniel Wilson, giving an Anniversary Address in 1851 to the Society of Antiguaries of Scotland, congratulated the Society on the decision 'to resume the printing of our Proceedings in a modified form, which, while it will, as I trust, furnish a new source of energy to ourselves, will also restore us to a more active intercourse with Kindred Societies, both at home and on the continent'.²⁰

In the same address Wilson noted that 'the long delay which has taken place in the printing of Transactions, has not been allowed to pass without repeated remonstrances from those who were ignorant of the conflicting claims on the very limited resources at our command'.²¹ Principal among these claims was, of course, the cost of maintaining the Society's museum, and Wilson devoted much of his address to explaining the new arrangements which had been made for the maintenance and development of these collections:

by a deed of conveyance prepared by the Lords of Her Majesty's Treasury, with the concurrence of the Honourable Board of Trustees for the encouragement of Arts and Manufactures, and now finally approved of, and adopted by, the Society, we have made over to the Crown, as public property, the whole collections of Antiquities, Coins, and Medals, MSS., Books, etc., formed during the last 70 years, to be the nucleus of a National Archaeological Museum for Scotland. The Lords of Her Majesty's Treasury, in accepting this gift for the nation, agree, on their part to provide at all future times fit and proper accommodation for the preservation and exhibition of the collections for the public, in the galleries of the Royal Institution, or other public buildings in Edinburgh, as well as for the meetings of the Society, and reserve in the hands of the Society's Office-Bearers the curatorship of the entire collections. This arrangement has been completed after mature deliberation, as the one best calculated to secure the advancement of Archaeological science, to promote popular education, and to excite a national interest in the preservation of the monuments of early art and ancient civilisation; and we have the satisfaction of believing that, in making some personal sacrifice in the relinquishment of our proprietary interest in these valuable collections, we are thereby providing the best of all securities for their permanency and extension.²²

Despite these protestations of 'sacrifice', the Society was enabled by this agreement to use its financial resources in other areas, particularly in the Proceedings, without relinquishing total control of it collections. The history of the Museum is reviewed elsewhere in this volume, but a few general remarks are necessary here to understand the central place it and its officers occupied in Scottish archaeology during the late Victorian period. Since the Society retained control of the management of the Museum and the two institutions consequently acted in concert, they represented a formative influence on Scottish archaeology. Perhaps surprisingly, this influence seems to have strengthened as the nineteenth century progressed. In 1851 Wilson felt that 'we cannot, with justice, consider the collections formed by the Society as in any sense fit to constitute a National Archaeological Museum. Valuable as they are, they are merely the fruits of private zeal, and of the persevering exertions of a small body of men, labouring, under many disadvantages, to accomplish, with extremely limited means, what is elsewhere regarded as the proper duty of the Government.²³ Yet by 1892 an unstated author, probably Joseph Anderson, writing a description of the Museum, could say that it 'has now been opened to the public, in the spacious premises appropriated to it by the Board of Manufactures, consisting of the entire east wing of the National Portrait Gallery buildings. . . . The result of the great increase of space and new methods of arrangement is that the series of Scottish Antiquities is now seen to be a representative collection, national in character and unsurpassed in scientific interest by any national collection in Europe.²⁴ We must, of course, take into account the fact that these commentators were both intimately involved in the Museum and had their own reasons for

wishing to emphasise its deficiencies or qualities. Nevertheless, the essential accuracy of their statements is, I think, indisputable.

Yet the increase in guality and power of the National Museum during the nineteenth century took place against the background of an expanding number of local museums. The nineteenth century was indeed the period of the greatest expansion of public museums in Britain. Fewer than a dozen existed in 1800, but the number had grown to almost 60 by 1850, and between 1850 and 1914 nearly 300 were established, almost a hundred occupying new buildings.²⁵ In many cases the same building served to accommodate museum, art gallery and library, which reflected the concern felt in urban areas, where these new foundations were concentrated, to compensate for the bleak physical environment with an improved cultural one. The Museums Act of 1845 and the Public Libraries Act of 1850 marked the beginning of legislation designed to encourage their foundation, although in many cases the establishment of a museum involved the union of private philanthropy and public resources. Patrons like James M'Lean, a timber merchant in Greenock, or Thomas Smith in Stirling were often crucial in the translation of local initiative into a fully operating institution. Even so, the results were often far from speedy and the result in museums less than effective. In 1851 Adam Arbuthnot, a merchant in Peterhead, bequeathed his collection to the town. His will stated that the Trustees of his collection should be the Provost, Magistrates and Council and that 'in case any Act shall be passed by the Legislature for the vesting, management and maintenance of Museums of Works of Art, or others, in Burghs, then my said Museum and Cabinet of Coins shall be placed under the provision of such Act'. But George Black, visiting the Museum in 1887, found that 'few things of any Archaeological or Antiguarian value have been added since then [1851]'.26

The reasons behind the establishment of museums were very much concerned with raising the moral tone of the population at large, with a consequent benefit for the whole of society. They were intended to provide an opportunity for the working classes to obtain a better understanding of the trades and industries in which they were employed and to observe designs of the highest quality, since exposure to such information could only benefit trade and manufactures. To this very practical base could be added the less specific, but not unimportant, aim of bolstering the social order: 'where our people are systematically excluded from the sight and enjoyment of the proofs of our present refinement and progress in the arts, and never by the remotest chance see such testimonies of the national growth to greatness - of our progress from early times in art and science, or learn to be proud of our national history by its monuments — of its heroes by the memorials of them which art can alone provide, there is an element of decay, wrote one commentator as part of his advocacy of provincial museums.²⁷ The architectural styles of the buildings which housed these museums, whether it was the Neo-classical Hunterian Museum in Glasgow or the Gothic edifice in Dundee, reflected less explicit but equally stronglyheld attitudes. Both styles lent themselves to the construction of buildings with a monumental quality which suitably reflected civic pride and were fitting tributes to the philanthropy which was so often an integral part of their foundation. Similar factors lay behind the display systems adopted, for behind the expressed aim of ministering to the culturally impoverished was the implicit demonstration of national or local communal wealth. Museums were, one modern commentator remarked, 'the cultural counterpart of that other Victorian innovation, the department store'.²⁸ Like those stores, the emphasis was on variety and mass to such an extent that the primary communication was not involved with the object but with a positive statement about the society which had made such displays possible.

These attitudes meant that the academic role of these institutions was extremely ill-defined and certainly not easily reconciled with the primary aim, as stated in the 1845 Act, of providing 'for the Instruction and Amusement of the Inhabitants'. Anderson and Black in their survey of local museums in Scotland (1888) constantly complained of the lack of any systematic organisation in the arrangement of the collections, and their remarks were as pertinent to the museums run by local societies as those supported by the rates. The lack of any firm policy, which these criticisms indicated, combined with an emphasis on variety, perhaps explains why the National Museum was able to establish such a dominant holding of Scottish archaeological material and to do so moreover without coming into serious conflict with the local museums. 'If the National Museum were non-existent', wrote Joseph Anderson, 'and if all the contents of all the local Museums (so far as these contents are known to be Scottish) were brought together, they would fail to furnish the materials for a systematic Archaeology of Scotland, as we now know it. To take a striking instance. In the Museum at Forres, which is the nearest to the Culbin Sands, I found that extraordinarily rich locality represented by a dozen arrowheads; while

the result of the systematic effort made by the Society of Antiquaries of Scotland to ascertain the capabilities of the Culbin Sands as an archaeological index, has been the accumulation in the National Museum of upwards of 15,000 specimens, chiefly of Flint and Stone Implements; while from another sandy district in the south of Scotland, which is scarcely represented in any local Museum, we have amassed about 10,000 specimens.²⁹ This lack of concern with material from the area in which the museum was located is reflected in the attitudes of local antiquaries. Many of them chose to send the objects they most valued to the National Museum in Edinburgh where they could feel that their objects, if not displayed — and most of them were — could at least contribute in full to the developing knowledge of Scotland's past (I owe this point to Mr R. B. K. Stevenson). No analogous situation developed in the south, but in Scandinavia, an area with which the Society maintained particularly strong links, the National Museums played a similarly influential role in the development of archaeology which went far beyond the mere acquisition of objects.³⁰

This review of the organisational basis for Scottish archaeology has shown that the adopted pattern differed in some respects from that which evolved in England. In turning now to consider some of the central issues in archaeology in the second half of the nineteenth century, we shall find a greater degree of coherence between the attitudes of Scottish workers and those of their counterparts in areas to the south. It has become customary in writings dealing with the history of archaeology to discuss it in terms of the views of the major figures of the time, with the implication that they were carrying all before them. While they were undoubtedly influential and are therefore worthy of great consideration, it would be a mistake to treat their views as representative of all archaeological opinion at the time. A single example will serve to make the point. In his preface to the first edition of the Archaeology and prehistoric annals of Scotland, Daniel Wilson wrote,

It has fared otherwise with Archaeology. Rejected in its first appeal for a place among the sister sciences, its promoters felt themselves under no necessity to court a share in popular favour which they could readily command, and we have accordingly its annual conferences altogether apart from those of the associated sciences. Archaeology, however, has suffered from the isolation; while it cannot but be sooner or later felt to be an inconsistency at once anomalous and pregnant with evil, which recognises as a legitimate branch of British science, the study of the human species, by means both of physiological and philological investigation, but altogether excludes the equally direct evidence which Archaeology supplies. It rests, however, with the archaeologist to assert for his own study its just place among the essential elements of scientific induction, and to show that it not only furnishes valuable auxiliary truth in aid of physiological and philological comparisons, but that it adds distinct psychological indices by no other means attainable, and yields the most trustworthy, if not the sole evidence in relation to extinct branches of the human family, the history of which possesses a peculiar national and personal interest for us.³¹

It is evident from this and other writings of Wilson that he firmly believed that archaeology should unite with other sciences, and indeed that archaeological evidence was of such value that archaeologists should not hesitate to involve themselves in matters which had hitherto been the province of other subjects. Yet Alexander, in delivering the Anniversary Address of 1856 to the Society of Antiquaries of Scotland, showed that Wilson's views were altogether too radical for some:

I am not desirous that we should extend our enquiries beyond the department to which they have hitherto been for the most part confined. The use of the term 'Archaeology', which has become of late the favorite designation of our science, has, I think, betrayed some into a wider conception of what we aim at than entered into the minds of the founders and early members of the Society, or than is in my humble opinion, at all favourable to the success of our pursuits. . . . Hence, men may be true and zealous archaeologists, though they leave unexamined many objects belonging to the past, and confine themselves to such as lie within a certain well-defined sphere. That sphere I take to be that which is determined by the usages and products of those who have lived in the ancient time. What they themselves were, to what race they belong, or whence they migrated, or how they came to the place of their settled habitation, and by what deeds of battle or of enterprise they signalized their name, it is for other sciences, such as History and Ethnology. to declare. The province of the archaeologist lies within the region of their everyday life, as exist in a given locality; he has to ask how they lived, - in what way they used their ingenuity and labour to provide themselves with what might supply the necessities or minister to the luxuries of life, - what were the implements they used, the dwellings they erected, the garments they wore, the language they spoke, the food they used, the rites they followed, and the methods they employed generally to secure the objects for which all men with more or less of intelligence seek. This I take to be the sphere, as respects our own country, which properly belongs to us as Scottish antiquaries; and I cannot but believe that no small advantage will accrue for our exploring this sphere to the full, and keeping ourselves to it.32

These two quotations show quite divergent views about the aims which archaeologists should be adopting, but it would be a mistake to suppose that they represented the only opinions current at the time. Perhaps the most characteristic feature of British archaeology in the period after 1840 was the variety of positions which were championed to a greater or lesser extent. This is hardly to be wondered at when we consider the upheavals caused by the considerable number of people wishing to be active, at least to the extent of joining a society. In a sense the disquiet now came from within for, as the ridicule which had been heaped on antiquarianism now faded away, there emerged a strong desire that the subject should have redefined aims more befitting its new status. Further, it must be remembered that there was as yet no professional group, and no significant institutions, which could provide a lead in such matters. There were antiquaries whose reputation and work eventually made them influential, but in charting their emergence we should not forget that many of their views were of no significance in the long term, and that below them were a mass of workers with very little in the way of orthodoxy to guide their speculations.

Whatever differences existed with regard to the role of archaeology. all were agreed that the achieving of those aims required the adoption of new methods and approaches. When he was presented with the Grand Cross of the Order of Dannebrog, Thomsen chose as his motto 'things first, books later'³³ and in those few words he has effectively summarised the change in attitude. 'Nearly all antiguarian pursuits in this country have heretofore,' wrote Daniel Wilson, been based 'on classical learning', with the dire consequence that 'it has been accepted as an almost indisputable truth, that, with the exception of the mysteriously learned Druid priests, the Britons prior to the Roman period were mere painted savages'.³⁴ This dependence upon classical authors for insight into man's past was now to be firmly rejected in favour of inductive archaeology.³⁵ There was widespread support among antiquaries for the efficiency of an inductive approach, if by that phrase we understand a belief in the pattern of reasoning which enables one to pass from statements of particular pieces of information to general pronouncements which not only summarise the matter contained within the statements of information but also expand our understanding beyond that summary. The appeal of this new philosophical position was that its adoption brought archaeology into the framework of current scientific practice and the adoption of such procedures would, it was believed, lead to a comparable structure of laws similar to those achieved in the natural sciences. Simpson described Stuart's work on the sculptured stones of Scotland (Vol. 1, Aberdeen 1856) 'as a memorable example, and as a perfect Baconian model for analogous investigation on other corresponding topics — in the way of the full

and careful accumulation of all ascertainable premises and data before venturing to dogmatize upon them'.³⁶ Induction, therefore, held out the glittering prospect to antiquarian workers of transcending the mere description of discoveries and cataloguing of facts to arrive at a broader and deeper understanding of prehistoric man. It gave a firm intellectual air to what was otherwise in danger of becoming an activity orientated towards collecting. The sterility of collecting with no greater prospect than the accumulation of yet larger assemblages of material was one that had worried antiquaries in the past.³⁷ The new philosophy dealt effectively with this problem, since it was now clear that the more information that was acquired, the greater was the potential for that knowledge other than a summary of the facts.

Few antiquaries, of course, were claiming that their own work or the work of others had carried the process of induction through to a conclusion. Indeed, Simpson offered stern warnings about the dangers inherent in attempting to do so:

... all past experience has shown that it is useless, and generally even hurtful, to attempt to frame hypotheses upon one, or even upon a few specimens only. In archaeology, as in other sciences, we must have full and accurate premises before we can hope to make full and accurate deductions. It is needless and hopeless for us to expect clear, correct, and philosophic views of the character and of the date and age of such archaeological objects as I have enumerated, except by following the triple process of (1) assiduously collecting together as many instances as possible of each class of our antiquities; (2) carefully comparing these instances with each other, so as to ascertain all their resemblances and differences; and (3) contrasting them with similar remains in other cognate countries ...

The same remarks which I have just ventured to make, as to the proper mode of investigating the classes of our larger Archaeological subjects, hold equally true also of those other classes of antiquities of a lighter and more portable type, which we have collected in our Museums . . . It is only by collecting, combining, and comparing all the individual instances of each antiquarian object of this kind — all ascertainable specimens, for example, of our Scotch stone celts and knives; all ascertainable specimens of our clay vessels; of our leaf-shaped swords; of our metallic armlets; of our grain-rubbers and stone-querns, etc etc; — and by tracing the history of similar objects in other allied countries, that we will read aright the tales which these relics — when once properly interrogated — are capable of telling us of the doings, the habits, and the thoughts of our distant predecessors.³⁸

Yet the long-term nature of these goals and the difficulties in achieving them served only to emphasise the importance of the contribution of every worker, however minor. The situation was succinctly summarised by R. W. Cochran-Patrick in issuing the following plea to the Ayrshire and Galloway Association: that more workers in the localities should come forward. As the object of the Association is simply to record facts, and provide materials for future generalisations, no profound or special archaeological knowledge is required. Accurate descriptions and truthful drawings of remains or relics are all that is necessary, and contributions of that kind will be of the greatest use both to the Society and to Archaeological Science.³⁹

In this new atmosphere even casual finds of antiquities had a significance which demanded interest and concern. It is surely these views that lay behind the concerted attack on the operation of the law of Treasure Trove in the 1850s. Wilson claimed that 'its operation has constantly impeded researches into the evidences of primitive art, and in many cases has occasioned the destruction of very valuable relics'.⁴⁰ Rhind, who devoted a pamphlet to the subject, was even more outspoken in his remarks: 'practical inquirers have so frequently found that the species of terrorism, which it bears in the popular eye, has had a hand in dooming to secret destruction, or scarcely less fatal concealment, so many objects not more precious intrinsically than ethnographically, that a tendency has, perhaps naturally, sprung up to regard this law as the bugbear of Antiquarianism'.⁴¹ Every object was important now, and certainly those that would be claimed as Treasure Trove.

This desire to adopt methods and approaches which could be regarded as truly scientific was reflected in attempts to weld alliances with subjects whose status was not in doubt, particularly geology and ethnology. Geology had a considerable reputation amongst the sciences during the nineteenth century, and achievements in this field were certainly influential in changing attitudes to the past. 'See, also,' wrote Alexander, 'how one of the most commanding and progressive sciences of modern times. I mean geology, seems almost to demand the researches of the archaeologist to complete that record of primeval man of which her readings among the earth's strata furnish the first traces. Geology has finished her lessons in this department when she has showed us at what stage in the world's progress man became a dweller on its surface.⁴² In this sense the alliance with geology was to be welcomed since it could only enhance the standing of archaeology in public esteem. Nevertheless it contributed little to archaeological method, although Simpson thought there were analogies between the two subjects,⁴³ and, except for the important question of man's first appearance on earth, it contributed little to the interpretation of archaeological finds. Ethnology was altogether more important in this

respect and we have seen that the radical element in archaeology represented by men such as Wilson considered the fostering of this relationship to be of prime importance. The contribution of ethnology was to be twofold. The first involved the use of data from other areas of the world to provide comparisons for and insights about prehistoric material. This was not, of course, a particularly new theme, although its perceived relevance greatly increased its use, and the more explicit comparisons depended upon the newly appearing and betterdocumented studies of non-European man. Ethnology's second contribution was of much greater fundamental importance since it involved archaeology with racial theory and later social evolutionary theory. Racial theory, particularly that concerned with the history of man, was a subject of great concern to many more people than ethnologists and archaeologists in the middle of the nineteenth century.

It is not surprising, therefore, that before the mid-1860s concern with the integration of ethnology and archaeology was almost wholly centred on racial matters. At the time when Wilson began extolling the value of a link between the two subjects in the early 1850s, the standard ethnological orientation, exemplified in the attitudes of Prichard and Latham, can be essentially characterised as linguistic ethnology. The central belief of original human unity (monogenesis) was little doubted, and the role of ethnology was to demonstrate that unity by providing information on the time between the dispersal of man across the earth and the beginnings of historical material for each nation. Such documentation relied heavily upon diffusionist and historical explanation, particularly comparative linguistics, with a dependence on environmental factors to clarify the problem of contemporary variations. Yet even as these aims were being formulated they were being threatened by the emergence of a more strongly physical and anatomical approach to man, together with the resurgence of belief in polygenesis or a multiplicity of races of man. It was these latter developments that particularly appealed to Wilson and in which he saw the possibilities of a greater archaeological involvement. It is to be regretted, he wrote, 'that this branch of physical archaeology has heretofore been so little esteemed in this country in comparison of the contributions afforded by philological researches to ethnology. It is a matter of great importance, to know whether the nomadic Celtae peopled for the first time the unoccupied waste and forests of Europe, or superseded elder aboriginal races. . . . Still greater is its value in relation to the other questions which demand a reply from the ethnologist, as to the origin of the human family from one or more stocks, and the migration from a common centre, or cradle-land, which, in so far as relates to the historic races, appear distinctly to coincide with the Mosaic history of the human race.⁴⁴ These were important aims, some of the most central questions of the day, and if archaeology could have been seen to have contributed significantly to their resolution, then its position as a major science would have been assured. Wilson used the physical approach to demonstrate the kind of information that could be achieved. He measured 39 Scottish skulls, using procedures developed by Morton in America, to suggest that people with a dolichocephalic skull were succeeded by people with a brachycephalic skull and that these skull-forms were significant in racial terms. Rather interestingly, this conclusion was at variance with the findings of Nillson, whose work with that of Retzius had clearly been influential in directing Wilson to this line of enquiry.

Despite his pioneering efforts Wilson's work in this field was limited, but it did ensure that the Scottish material was not ignored. Others were keen to take on the research, and in 1850 John Thurnam announced that he was 'collecting information in reference to the crania from tumuli of different ages, with the view of producing, if possible, some conclusions as to the form of the skull, and other characteristics of the skeleton in the aboriginal and succeeding races who settled in the British Isles. . . . I shall feel indebted to any gentleman who may possess crania from barrows, the age of which can be authenticated by the associated remains, who will allow me the use of them, for the purpose of being measured and described.⁴⁵ This concern with skeletal material and particularly the crania was something new in archaeological studies, since hitherto there had been a general reluctance to do anything other than re-inter any human remains found during the excavation of burial mounds. It cannot be explained simply as a product of the increased awareness of the relevance of ethnological methods for archaeology. Attempts to determine racial varieties in man were not new by the mid-nineteenth century. Blumenbach, whom Barnard Davies saw as the pioneer of such work through the analysis of skulls, had published his first important work in 1775 and his dedication of the third edition of On the natural variety of mankind (1795) to Sir Joseph Banks shows that his work was at least known in Britain.⁴⁶ There are, moreover, other references in the earlier British antiguarian literature which show that the reluctance to collect skulls can not be attributed to any ignorance of the work of

craniologists.⁴⁷ The answer, I think, lies more with the activities of the resurrectionists, especially in the early nineteenth century. At that time the demands of a growing population for medical services led to expansion of the medical profession and particularly medical research. However, the failure to develop a satisfactory system for the provision of bodies for the teaching of anatomy led to most corpses supplied to anatomy schools being those of people recently deceased, buried and illegally disinterred. The difficulties for large medical schools like those in Glasgow and Edinburgh involved going as far afield as Ulster to obtain an adequate supply of corpses;48 in 1832 it was estimated that British medical schools required 1100-1200 bodies per annum to meet their requirements and that the vast majority of these were provided illegally.⁴⁹ Although this illegal practice caused widespread public concern and disquiet, successive governments were reluctant to introduce legislation since anatomical experiments also aroused public indignation. The deteriorating situation led to a Select Committee being established in 1828 and its recommendations resulted in the Anatomy Act of 1832.50 This certainly eradicated the activities of the resurrectionists, but public prejudice towards scientific research involving human bodies was only slowly reduced.⁵¹ In these circumstances it seems reasonable to interpret the reluctance of the excavators of burial mounds to collect human remains as a desire to avoid association in people's minds with the resurrectionists rather than with a simple disinclination to interfere with the physical remains of the dead 52

These prejudices had clearly subsided by the time Wilson, Thurnam and others began seriously to promote the value of analysis of human skeletal material. Yet it did not achieve the importance which these workers anticipated in their early pronouncements, largely because it became embroiled in wider controversies which were largely peripheral to archaeological concerns. The first demonstrations of the potential of this method, exciting though they were, disguised the fact that ultimately this interpretation of British prehistory could not rest solely, or indeed largely, on data collected in Britain. There were, moreover, considerable problems in integrating this information with other archaeological material, a point which Thurnam alone seems to have appreciated. However, the principal reason for the failure of racial analysis to be established as an accepted archaeological method was its involvement in a controversy concerning monogenesis and polygenesis. Both had considerable histories by the middle of the nineteenth

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century and, although polygenist thought had acquired support in France and America, the alternative hypothesis had remained the orthodox Christian viewpoint and accepted British attitude. The reemergence of this old controversy took the emphasis away from matters to which British archaeology could make any serious contribution. The adoption of polygenesis by Davis and Thurnam, who became the leading exponents of this method, meant that the relative importance of racial analysis was dependent upon the supplanting of monogenesis by polygenesis as the orthodox position. This failed to come about because, although polygenist thought continued after and indeed felt supported by the publication of Darwin's views,⁵³ the latter provided the essence of a new approach based on cultural evolution. The controversy provoked institutional upheavals within ethnology,⁵⁴ with the result that the importance of anatomical work in archaeology was minimised in favour of the new orthodoxy of cultural evolution.

The emergence of social evolutionary theory provided the dominant theme in anthropological thought during the last thirty-five years or so of the nineteenth century,⁵⁵ and precluded the continuing development of racial studies as part of the mainstream of anthropological work. There is no clear-cut division between the two approaches in archaeological writings. Huxley, for instance, who was clearly to be associated with social evolutionary ideas, was quite happy to contribute an analysis of the human remains to Samuel Laing's study of Caithness material⁵⁶ and even to be sympathetic to Thurnam's work, but there was no longer any sense that this methodology was central to archaeological activity. Nevertheless, Tylor put the prevailing point of view quite bluntly in *Primitive Culture*:

These pages will be so crowded with evidence of such correspondence among mankind, that there is no need to dwell upon its details here, but it may be used at once to override a problem which would complicate the argument, namely the question of race. For the present purpose it appears both possible and desirable to eliminate considerations of hereditary varieties or races of man, and to treat mankind as homogeneous in nature, though placed in different grades of civilisation. The details of the enquiry will, I think, prove that stages of culture may be compared without taking into account how far tribes who use the same implement, follow the same custom, or believe the same myth, may differ in their bodily configuration and the colour of their skin and hair.⁵⁷

The questions were now to be about diffusion or independent invention, and Stocking notes that the cultural evolutionists, in adopting the idea of plurality of origin in the notion of independent invention, turned the polygenist argument on its head by making such diversity into evidence of unity of psychic make-up, the very thing which the polygenists rejected.⁵⁸ Such aspects, however, should not lead us away from the essential point that race was no longer recognised as an issue of substance.

The essentials of the evolutionary approach and their particular relevance to archaeological material were best summarised by Lane-Fox in his description of the principles of classification which formed the basis for the arrangement of his own collections (1875). Further, he left no doubt as to the source of these ideas:

What the palaeontologist does for zoology, the prehistorian does for anthropology. What the study of zoology does towards explaining the structures of extinct species, the study of existing savages does towards enabling us to realise the condition of primeval man. To continue the simile further, the propagation of new ideas may be said to correspond to the propagation of species. New ideas are produced by the correlation of previously existing ideas in the same manner that new individuals in a breed are produced by the union of previously existing individuals. And in the same manner that we find that the crossing of animals makes it extremely difficult to trace the channels of hereditary transmission of qualities in a breed, so the crossing of ideas in this manner makes it extremely difficult to trace the sequence of ideas, though we may be certain that sequence does exist as much in one case as the other.

Progress is like a game of dominoes — like fits onto like. In neither case can we tell beforehand what will be the ultimate figure produced by the adhesions; all we know is that the fundamental rule of the game is *sequence*.⁵⁹

These allusions to zoology emphasise the clear kinship of these formulations with Darwinian ideas in biology, although there is no simple parentage which can be inferred; Darwin, notes Burrow, 'was certainly not the father of evolutionary anthropology, but possibly he was its wealthy uncle'.⁶⁰ Indeed there were those, such as Bastian, who rejected Darwin but accepted cultural evolution.⁶¹ This theory contains three elements of relevance to anthropology, although all were controversial. The first was that man was not outside nature but a part of it through sharing a clear relationship with animals. Secondly, Darwin's views appeared to support those aspects of racial theory which saw differences in terms of environmental factors acting over a long time span. Finally, there was the principle of natural selection which entered sociology and anthropology in the unfortunate 'survival of the fittest' viewpoint. Of course, behind Darwin was Lyell's uniformitarianism outlined in the *Principles of Geology*. Lyell's work assumed a con-

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tinually operating law, the effects of which are still observable and from which could be inferred past processes. Further, his hypothesis necessitated an enormous time scale. The achievement of Lyell and Darwin was to show how the presently determinable laws of nature could indicate the causes of even the greatest changes, provided a sufficiently long time scale could be accepted. The final part of this scientific support system, as far as evolutionary anthropology was concerned, was provided by the acceptance of a high antiquity for man following Prestwich and Evans' visit to the Somme gravels.

Together with Pitt-Rivers, the principal archaeological advocates of the new theories were members of the anthropological establishment whose interest was strongly archaeological. Lubbock and Evans. In their works,⁶² especially those of Evans, can be seen the beginnings of typological analysis based on evolutionary premises that found its greatest expression in Abercromby's work on Bronze Age pottery (1912).63 For most archaeologists these typological studies were an altogether too sophisticated response to the new approach, which was reflected rather crudely by a resurgence of belief in progress, with the general implication that the 'ruder' an object was, the greater its antiquity. There can be no doubt that the racial debates earlier in the century had temporarily weakened the appeal of progress as a mechanism for chronological judgements, but it had remained a potent theme for general explanation in archaeology. Stuart, for instance, drew attention to the importance of the 'accumulations of materials for illustrating the progress of man in times antecedent to his knowledge of writing.⁶⁴ There were considerable difficulties in relating a simple idea of progress to individual finds, but in general terms the evidence seemed to be there. Few would have disputed Tylor's claim that

by comparing the various stages of civilisation among races known to history, with the aid of archaeological inference from the remains of the pre-historic tribes, it seems possible to judge in a rough way of an early general condition of man, which from our point of view is to be regarded as a primitive condition, whatever yet earlier state may in reality have lain behind it. This hypothetical primitive condition corresponds in a considerable degree to that of the modern savage tribes, who in spite of their difference and distance, have in common certain elements of civilisation, which seem remains of an early state of the human race at large.⁶⁵

Further, the mutual dependence inherent in Tylor's hypothesis did not cause much heart-searching among anthropologists or archaeologists, or weaken its appeal for either group. It must have seemed to archaeologists late in the nineteenth century that the subject really had become part of the prestigious field of Science. Scientific modes and attitudes had become part of the fundamental philosophy, particularly the idea that the progress of a subject was to be measured in terms of accumulation, for knowledge once acquired remained immutable.⁶⁶ Certainly, it seemed a far cry from the topographical tradition that dominated archaeological thinking in the early decades of the century.

Yet that same sense of national pride which is so evident in the work of the topographers was still a powerful source of motivation for the newer 'scientific archaeologists'. Nowhere is this more clearly demonstrated than in the work of the doven of Scottish archaeology at the end of the nineteenth century, Joseph Anderson. Just as Wilson had done in the middle of the century, Anderson reflects the trends and approaches of his time, moulded and applied to the Scottish material. Both men attempted the systematic arrangement of the evidence from Scotland and in so doing had occasion to make explicit statements about how they believed their aims could be best achieved. Superficially, of course, there are points of great similarity between the major works of Wilson and Anderson, particularly in their use of the Three Age system. What is important, however, is the differences between the two, since what was new and radical in Wilson's day, such as the use of the Three Age system, had become commonplace by the time Anderson wrote.

A survey of Anderson's archaeological work has recently been published,⁶⁷ and there is no need to repeat the information collected there. But it is, I think, worthwhile looking in some detail at his first Rhind Lecture, given on 14 October 1879, and published, as delivered, in the first volume of *Scotland in Early Christian Times*.⁶⁸ This is without doubt Anderson's most important statement of his philosophy and shows not only the impact which the trends we have been discussing had on Scottish archaeology but also in some respects points the way to developments which did not come to fruition until after Anderson's death.

There can be no doubting his fervent sense of national pride, displayed in remarks such as:

We know that the history of Scotland is not the history of any other nation on earth, and that if her records were destroyed, it would matter nothing to us that all the records of all other nations were preserved. They could neither tell the story of our ancestors, nor restore the lost links in the development of our culture and civilisation.

Or even more passionately:

Is there any scientific, or other reason, which demands that our Archaeology should not begin at home? Can we possibly be more interested in the ancient history of other nations than in the ancient history of our own people? Are the sculptured stones of Nineveh really of more importance to us than the sculptured stones of Scotland? Can we possibly have an interest in the themes and legends of Egyptian or Assyrian sculptures which we cannot feel for the themes and legends carved on the monuments of our forefathers? It cannot be the fact that we have greater regard for other men's ancestors than for the memory of our own. I think, if we try to persuade ourselves of this, we shall fail, and if we deal closely with the question, we shall be obliged to confess that Scotland and its antiquities have claims to our attention and regard that are prior to all other lands, and all other antiquities.⁶⁹

But we should not interpret these remarks as indicating a narrowminded parochialism on Anderson's part. He had a clear sense of the way things should develop - 'when a number of limited areas have been exhaustively investigated, and the results placed on record, it may be possible to proceed a step farther, and to formulate general conclusions applicable to wide areas, such as Europe, or Eastern or Western Asia, or Africa or America, but at present no body of materials exists from which the archaeology of any one of these larger areas may be studied systematically'.⁷⁰ This was the essential justification for what he was attempting in his Rhind Lectures, and a mere glance at any of the works in his long list of publications will show how well informed he was about European procedures, attitudes and discoveries, particularly those in Scandinavia. The appeals to national feeling were not designed to promote any sense of insularity but rather were the means by which Anderson sought to ensure that Scottish antiquaries met their responsibilities to this wider goal.

The title of Anderson's lecture was 'the means of obtaining a scientific basis for the archaeology of Scotland', and there was no doubt in his mind that such a 'scientific basis' could be obtained. In view of the considerable emphasis placed upon archaeology becoming a science, the use of the term 'scientific archaeology' is in no way remarkable, nor is his emphasis on the importance of collecting facts. These were to be the 'exhaustive collection of materials' from which was to be extracted 'the story of human progress on Scottish soil'.⁷¹ But they had to be properly collected, 'for it is obvious that if the observations by which materials for comparison and induction are accumulated have not been scientifically made, the conclusions drawn from them can have no scientific value, and that the first necessity in every scientific enquiry is accurate observation, exhaustive in its range, and recorded

with the requisite precision and fulness of detail'.⁷² Once all this information is assembled it is to be subjected to a 'natural method' which is 'nearly akin to the scientific method' and involves two basic questions about the object's function and the material of which it is made. Thus,

by following this natural method, and interrogating each of the implements separately as to its purpose, we find no difficulty in getting out all the edged-tools and arranging them in separate heaps, consisting of different types of tool — such as axes, chisels, gouges, saws, knives, and so forth — or types of weapons such as arrow-heads, spear-heads, daggers, and so on. During this process of getting out the edged-tools and arranging them by their typical forms, a singular fact will have disclosed itself. In the first of our sorted heaps we shall have nothing but axes but we have axes in three materials — stone, bronze and iron. Every group has the same triple repetition of the tool in the same three materials. This, then, is the second problem — What is the meaning of the fabrication of the same tools in these three materials?

The testimony of universal experience tells us that the less suitable and effective material is always supplanted in time by that which is more suitable and effective, after it has become generally procurable. The more unsuitable implement may maintain the struggle for existence for a longer or shorter period, according to circumstances; but when it comes to be a competition of materials, the law is, that the fittest shall survive, and the less fit dies out by a process of degradation of the type and purpose of the implement for which the material continues to be used.⁷³

Here, indeed, is the social evolutionary legacy, and one would have to search very hard for a clearer explanation of how typology and function became so inextricably combined in the search for sequence. Anderson did not believe that archaeology could by itself determine actual dates without recourse to historical sources, but he attaches the same high importance to sequence that Pitt-Rivers did in his remarks quoted earlier. All of this is very much in keeping with the views of his time, but Anderson, cautious as he was, could partially perceive future developments. In particular, his emphasis on the importance of association, the geographical distribution of material, and the need to determine imports were all to become fruitful areas of study, some of them initially in the hands of other Scottish workers like Abercromby and Munro.

This survey has concentrated on broad trends in archaeology in the second half of the nineteenth century in order to show that it was very much a part of general archaeological development in Britain during that period. It was never wholly provincial in attitude and indeed at times, particularly at the end of the nineteenth century, it numbered among its practitioners archaeologists who will bear comparison with the best in Europe. In no small measure, the Society through its activities provided the environment in which archaeology of this quality could flourish. Certainly, some of the ideas seem less soundly based now than they did to people at the time, but no one who is seriously engaged in studies of Scottish archaeological material can avoid consulting the literature of this period, and the legacy must still be considered a significant one today.

NOTES

1. O. J. R. Howarth, The British Association for the Advancement of Science: a retrospect, 1831-1921 (London 1922); A. D. Orange, 'The British Association . . ., the provincial background', Sci. Stud. i (1971), 315-29; A. D. Orange, 'The origins of the British Association . . .', Brit. Jnl. Hist. Sci. vi (1972-3), 152-76.

2. The only recent consideration of this affair is the wholly one-sided account in J. Evans, 'The Royal Archaeological Institute: a retrospect', *Archaeol. Jnl.* cvi (1949), 1-11, pp. 1-5.

3. Piggott, 'The Origins of the English County Archaeological Societies' (1974), in *Ruins in a Landscape* (Edinburgh 1976), 171-95.

4. F. J. Haverfield, The Roman Occupation of Britain (Oxford 1924), 81.

5. Quoted in J. M. Crook and M. H. Port, *The History of the King's Works* vi (London 1973), 641.

6. Society of Antiquaries of Scotland, Correspondence Books, 7 June 1844.

7. S. Piggott, Ruins in a Landscape, 191.

8. K. S. Inglis, 'Patterns of religious worship in 1851', Jnl. Eccl. Hist. xi (1960), 74-86.

9. J. Anderson and G. F. Black, 'Reports on Local Museums in Scotland, obtained through Dr R. H. Gunning's Jubilee gift to the Society', *P*[roceedings of the] S[ociety of] A[ntiquaries of] S[cotland] xxii (1887-8), 422.

10. S.A.S. Corr., 29 March 1844.

11. Ibid., 5 August 1846.

12. W. L. Alexander, 'Anniversary Address', PSAS ii (1854-7), 300.

13. M. Plant, The English Book Trade (2 ed., London 1965), 269-419.

14. J. Evans, A History of the Society of Antiquaries (Oxford 1956), 237, 276.

15. See A. R. B. Haldane, Three Centuries of Scottish Posts: an historical survey to 1836 (Edinburgh 1971), 248-73.

16. H. Robinson, Britain's Post Office. A history of development from the beginnings to the present day (London 1953), 163-5, 175, 194.

17. S.A.S. Corr., 1853.

18. J. Evans, A History of the Society of Antiquaries (1956), 305.

19. Surrey Archaeol. Collections vi (1874), vii.

20. D. Wilson, 'Anniversary Address', PSAS i (1851-4), 2-7.

21. Ibid., 6.

22. Ibid., 2-3.

23. Ibid., 3.

24. [J. Anderson], 'Description of the National Museum of Antiquities', 1892. TS. in N.M.A.S. Library.

25. J. M. Crook, The British Museum: a case-study in architectural politics (Harmondsworth 1973); J. Jones, 'Museum and art gallery buildings in England, 1845-1914', pt i, Mus. Jnl. lxv (1966), 230.

26. J. Anderson and G. F. Black, 'Reports on local museums', PSAS xxii (1887-8), 364-5.

27. D. Murray, Museums, their History and their Use (3 vols., Glasgow 1904), 270; C. H. Wilson, 'On the formation of provincial museums and collections of works of art', Trans. Archit. Inst. Scot., iv(1) (1854-5), 56.

28. M. Brawne, The New Museum: architecture and display (New York 1965), 8.

29. Anderson and Black, 'Reports', 421.

30. O. Klindt-Jensen, A History of Scandinavian Archaeology (London 1975), 49-96; C. A. Nordman, Archaeology in Finland before 1920 (Helsinki 1968), 9.

31. D. Wilson, *The Archaeology and Prehistoric Annals of Scotland* (1 ed., Edinburgh and London 1851), xiii.

32. W. L. Alexander, 'Anniversary Address', PSAS ii (1854-7), 301-2.

33. Nordman, Archaeology in Finland, 9.

34. Wilson, Archaeology and Prehistoric Annals (1851), xiv.

35. J. Y. Simpson, Archaeology: its past and future work (Edinburgh 1861), 5, marginal note.

36. Ibid., 37-8.

37. E.g. Sir R. C. Hoare, The Ancient History of North Wiltshire (London 1819), 93.

38. Simpson, Archaeology, 40-42.

39. Archaeol. Hist. Coll. Ayr & Galloway, vi (1889), xvii.

40. Wilson, Archaeology and Prehistoric Annals (1851), xix.

41. A. H. Rhind, The Law of Treasure Trove: how can it be best adapted to accomplish useful results? (Edinburgh and London, 1858), 5.

42. Alexander, 'Anniversary Address', PSAS ii (1854-7), 304.

43. Simpson, Archaeology, 44-5.

44. D. Wilson, 'Inquiry into the evidence of the existence of primitive races in Scotland prior to the Celtae', Notices and Abstracts of Communications to the British Association (1850), 142.

45. J. Thurnam, 'Observations on Danish tumuli, and on the importance of collecting crania in tumuli', Archaeol. Jnl. vii (1850), 35.

46. See T. Bendyshe (ed.), The Anthropological Treatises of Johan Friedrich Blumenbach (London 1865), 149-54.

47. E.g. Sir R. C. Hoare, 'An account of a stone barrow, in the parish of Wellow, at Stoney Littleton in the county of Somerset, which was opened and investigated in the month of May, 1816', *Archaeologia* xix (1821), 47.

48. A. McClelland, 'The resurrection men', Ulster Folk Transport Museum Year Book (1977-8), 15.

49. Hansard, 3 ser. ix (1831-32), 580.

50. J. B. Bailey, The diary of a Resurrectionist . . . and a short history of the passing of the Anatomy Act (London 1896), 89-119.

51. F. K. Donnelly, 'The destruction of the Sheffield School of Anatomy in 1835: a popular response to class legislation', *Trans. Hunter Archaeol. Soc.* x(3) (1975), 167-72.

52. Cf. F. Celoria, 'Burials and archaeology: a survey of attitudes to research', *Folklore* lxxvii (1966), 161-83.

53. G. W. Stocking, Race, Culture and Evolution: essays in the history of anthropology (New York 1968), 42-68.

54. G. W. Stocking, 'What's in a name? The origins of the Royal Anthropological Institute (1837-71)', Man n.s. vi (1971), 369-90.

55. I. L. Murphree, 'The evolutionary anthropologists . . . John Lubbock, Edward B. Tylor, and Lewis H. Morgan', *Proc. Amer. Philos. Soc.* cv (1961), 265-300; J. W. Burrow, *Evolution and Society. A study in Victorian social theory* (Cambridge 1966).

56. S. Laing, Pre-historic Remains of Caithness (London and Edinburgh 1866), 83-160.

57. E. B. Tylor, Primitive Culture: researches into the development of mythology, philosophy, religion, language, art and custom (London 1871), i.7.

58. Stocking, 'What's in a name?' (1971), 385-6.

59. A. Lane-Fox, 'On the principles of classification adopted in the arrangement of his anthropological collection, now exhibited in the Bethnal Green Museum', *Journ. Anthrop. Inst.* iv (1875), 308.

60. Burrow, Evolution and Society, 14.

61. R. H. Lowie, The History of Ethnological Theory (London 1937), 30-38.

62. J. Lubbock, Prehistoric Times, as illustrated by ancient remains and the manners and customs of modern savages (1 ed., London and Edinburgh, 1865); idem, The Origin of Civilisation and the Primitive Condition of Man (London 1870); J. Evans, Coins of the Ancient Britons (London 1864), 17-32; idem, Ancient Stone Implements, Weapons and Ornaments of Great Britain (1 and 2 eds., London 1872, 1897); idem, Ancient Bronze Implements, Weapons and Ornaments of Great Britain (London 1881).

63. J. Abercromby, A Study of the Bronze Age Pottery of Great Britain and Ireland and its associated grave-goods (2 vols., Oxford 1912).

64. J. Stuart, Recent Progress of Archaeology: an address given at the opening meeting of the Glasgow Archaeological Society session 1865-6 (Glasgow 1866), 8.

65. Tylor, Primitive Culture, 21.

66. H. Dingle, 'The scientific outlook in 1851 and in 1951', Brit. Jnl. Philos. Sci. ii (1951-2), 98.

67. A. Graham, 'The archaeology of Joseph Anderson', PSAS cvii (1975-6), 279-98.

68. J. Anderson, Scotland in Early Christian Times. The Rhind Lectures in Archaeology – 1879 (Edinburgh 1881), 1-28.

70. Ibid., 2, note 1.

- 71. Ibid., 71.
- 72. Ibid., 21.
- 73. Ibid., 17-18.

^{69.} Ibid., 9, 11-12.