

CHAPTER III

ARCHAEOLOGICAL INTERESTS OF THE EARLY SIXTIES

1. The International Exhibition of 1862

The year 1861, or the year of the United Service Institution's sale, marked something of a turning point in Fox's life. For one, his commitment to professionalism and science had been confirmed, particularly through his collection. He was increasingly involved in administrative work at the United Services Institution, and active as well at the prestigious Royal Geographical Society. His ties to the scientific community, moreover, had been strengthened through a number of new acquaintances and contacts. In short, he had become less a professional soldier with scientific interests than a serious scientific amateur.

It was also a year of new beginnings in his military career. The most important factor was the end of the inquiry into his training methods, a complication of nearly four years' standing. Throughout that period the Army had persistently delayed ruling on the issue, and, in consequence, Fox had been left in an awkward position, both professionally and personally, at least since his return from Malta in 1857. On 5 December 1860, Kate Stanley wrote to her mother: 'We heard yesterday that Alice was very ill with a nervous fever which they are afraid might turn to typhus; it has been brought on by the excitement about the enquiry that is now going on about Augustus'.¹ But in January 1861, the matter was finally put to rest, largely due to the intervention of Lieutenant-Colonel Sir James Lindsay, the commander of Fox's battalion. Lindsay, who was also a personal friend of the Stanleys, managed to convince Sir John Pennefather (1800-1872), previously a Brigade Commander in the same division as Fox during the Crimean War and Fox's commanding officer at Malta during his tour there, to assume the responsibility for Fox's actions. That was substantiated in a long letter of February to Sir James Scarlett, the Adjutant General, and the matter was dropped shortly afterward.² 'Fox has had justice done at last', Johnny Stanley announced, echoing the family's satisfaction.³

One of Fox's first projects following his exoneration was the completion of a second paper on rifles, entitled 'On a Model Illustrating the Parabolic Theory of a Projection for Ranges in Vacuo', and presented at the United Service Institution on 20 May 1861.⁴ As with his earlier paper, it was based directly on his research on the rifle and on his work as an instructor. His main object was to present a way of judging distances, taking into account a bullet's loss of velocity, and corresponding loss of altitude, over long distances. His solution was merely to ignore air resistance as a factor, suggesting instead that the trainee marksman consider only the force of the projectile and the force of gravity. The resultant arc, as represented by the model, was a parabolic curve; on the basis of that, it

¹ Kate Stanley, Letter to Lady Henrietta Maria Stanley, 5 Dec 1860, Russell, Amberley Papers, I, 107-08.

² SSW, PRP, Alb, Alc.

³ Johnny Stanley, Letter to Lady Henrietta Maria Stanley, 30 Jan 1861, Mitford, Stanleys, p. 307.

⁴ Fox, 'Parabolic Theory'.

was possible to set a number of simple rules for adjusting sights. In his conclusion, he adopted a different metaphor from that of his earlier paper:

As the parabolic theory must, however, continue to form the basis of all future efforts in this direction, it may not, I trust, be thought that I have altogether engaged myself or occupied your attention upon a work of supererogation, if the model in any way contributes to improve the roadway upon this already well-beaten path, or to facilitate the early stages of those who may undertake fresh researches in this particular branch of mathematics.⁵

In November 1861, or some five months after his paper, Fox was assigned again to 'special service', that time on assignment in Eastern Canada.⁶ The immediate cause was the famous 'Trent Case', a diplomatic incident which nearly brought Great Britain into the American Civil War. Instigated by a Federal naval officer's decision to stop and board the British Steamship Trent in order to arrest two Confederate agents, the Trent Case required, from the point of view of the Admiralty Office, a harsh reprisal, something then widely supported by British public opinion. Credit for forestalling the move went to Prince Albert, who managed to reframe a demand for apology, as dictated by Russell and Gladstone, into a more conciliatory request for the release of the two agents. President Lincoln, in turn, met with their demands, thereby saving face himself, and shortly afterwards the two agents were returned.⁷

Just prior to the end of the affair, however, in January 1862, the First Battalion of Guards and the Second Battalion of Scots Fusiliers were sent to Nova Scotia, primarily as a show of force. Among the listed officers was an Ensign J.T.R. Lane Fox, one of Fox's Yorkshire relatives. Fox himself was sent out as early as 2 December, apparently to make arrangements for their reception.⁸ His main responsibility was to establish yet another training school, along the lines of that at Hythe, in order to train both Guardsmen and the Fusiliers as well as troops already in Canada. Fox, as an experienced instructor, was obviously the ideal choice for the job. It is also likely that he was expected to carry out at least rudimentary intelligence work, as his later involvement in intelligence in Ireland suggests, although nothing survives of his reports in that regard.⁹

⁵ Fox, 'Parabolic Theory', p. 501.

⁶ Service Record, Grenadier Guards, Regimental Orders 1861-63 (Rear of Book) Folio 12; Hamilton, III, 319-21.

⁷ For further on the Trent Case, see PRO, WO 33/11; and J.P.T. Burn, ed. New Cambridge Modern History, (Cambridge: at the Univ. Press, 1967). X, 639-64. Joel H. Wiener, ed. Great Britain: Foreign Policy and the Span of Empire, 1689-1971, (New York: McGraw Hill, 1972), I, 374, 476-80. On the Army's role: J.W. Fontescue, XIII, 522-23. On the Prince Consort: Frank Eyck, The Prince Consort: A Political Biography (London: Chatto and Windus, 1959), pp. 251-252.

⁸ Hamilton, III, 321.

⁹ Cf. Thompson, General Pitt-Rivers, p. 29.

By February 1862, Fox was back in London, apparently soon afterwards resuming his regular activities with the Second Battalion of Guards, then stationed at Wellington Barracks.¹⁰ The family, expanded during his absence by the birth of another daughter,¹¹ remained at Park Hill, with Fox commuting daily from across the river. Unfortunately, Fox still cared little for regimental work, and he was obviously impatient, particularly after his Canadian experience, to find a more interesting and, no doubt, more financially attractive position as soon as possible. Toward the beginning of summer something finally came through in the form of an assignment as Assistant Quarter-Master General in the Cork Division of Ireland. His appointment doubtless owed something to his father-in-law and perhaps also to Colonel Gordon, his past supervisor in Ordnance at Malta and now Master General of Ordnance in Ireland.¹² The position did not become vacant until August, however, so Fox still had a number of months in which to apply himself in London before his departure.

During the spring of 1862, Fox was involved in two major projects: assistance in the organization of the United Service Institution's contribution to the International Exhibition; and the arrangement and selection, as a member of the Exhibition's Military Committee, of the small arms exhibit there.

The International Exhibition of 1862, followed a pattern established over a decade before at the first, or 'Great', Exhibition in Hyde Park.¹³ It was held in a more substantial building, however, to the south of the park near the site of the later South Kensington Museum (now the Victoria and Albert). It was also more limited in scale. The general theme was manufactured goods, in contrast with the Arts Treasures Exhibition held in Manchester in 1857, but more in keeping with that sponsored by the Board of Manufacturers the previous year in Edinburgh. Fox's father-in-law, as President of the Board of Trade, was at least in part responsible for arrangements for the new exhibition, and together with Henry Cole (1808-1882), the future head of the South Kensington museum, helped select the design of the 'new Iron House', in which it was held.¹⁴ Fox's own involvement in the Exhibition was probably due to Lord Stanley's influence.

¹⁰ Hamilton, III, 423. The First Battalion was at the time in Dublin and other events tie Fox to London.

¹¹ Mitford, *Stanleys*, p. 329; Gray, *Index*, p. xxxv.

¹² Gordon was at the main garrison at Curragh beginning in May 1862. PRO, WO 17, 1124.

¹³ Luckhurst, pp. 125-26. For contemporary descriptions of the 1862 Exhibition see John Hollingshead: 'The New Temple of Industry', *The Intellectual Observer*, 3 (1862), 212-17; 'Taste of South Kensington', *Temple Bar Magazine* (Jul 1862), 471-80; *Illustrated London News*, 40 (Jan - Jun 1862), 502-3, 618-19, and 41 (Jun - Dec 1862), 170 and 421. Official and non-official descriptions are found in: *International Exhibition of 1862: The Illustrated Catalogue of the Industrial Department* (London: For Her Majesty's Commissioners, 1862); George Frederick Pardon, ed., *A Guide to the International Exhibition: with Plans of the Building, etc.* (London: Routledge, Warne and Routledge, 1862).

¹⁴ Henry Cole, *Fifty Years of Public Works* (London: G. Bell and Sons, 1884), I, 209-10. Stanley, as President of the Board of Trade, had also been involved with the Paris Exhibition of 1855 and served on the Commission of Management.

As with the original Exhibition of 1851, the Exhibition of 1862 suggests an interesting parallel to Fox's own scheme as a collector. In all there were three main sections: 'Raw Materials', 'Machinery' and 'Manufactures'. 'Military Engineering, Armour and Accoutrements, Ordnance and Small Arms' was a single class in the second section. Other classes included such categories as 'Horological Instruments', 'Musical Instruments' and so on. Each was judged along the same lines as before. Judges for 'Arms and Ordnance' included Colonel Gordon, Lieutenant-Colonel Lindsay and Captain Douglas Galton (1822-1899), all of them close acquaintances, both of Fox and the Stanleys. Major General Hay, from the Hythe School was also on the jury.¹⁵ Fox's role as a member of a class committee was a lesser one. Mostly he was required to help select the exhibits and lay them out for review and the Judges' inspection. Assisting him were Captain Tyler and Colonel T. H. Lefroy from the United Service Institution; Sir James Lindsay served as chairman.

The Exhibition clearly had an important impact on Fox's ideas. His later papers refer frequently to objects displayed there, particularly the pieces owned by the United Service Institution, and it is clear that he viewed the Exhibition as a model of organizational good sense.¹⁶ The Exhibition also presented the opportunity for Fox to meet a number of figures influential in museum work, including Richard Thompson, then acting as Superintendent of Exhibition Arrangements, and Edmund Oldfield, an Australian expert on timber and wood, who in turn helped Fox obtain further examples of his boomerangs and throwing sticks.¹⁷ In short, the Exhibition served to reinforce Fox's own efforts, while at the same time suggesting new avenues for the growth and organization of his own collection.

2. Work in Ireland

In August 1862, Fox's Irish post became vacant, and he and his family moved to Cork where he assumed the post of Assistant Quarter-Master General.¹⁸ Cork was at that time the headquarters for the Southwest Division, one of four military divisions in Ireland, and an important naval base. In all there were sixteen naval military stations located throughout the seven-county area over which the Division had authority. Cork City was the headquarters and site of the main garrison with facilities for approximately 5,000 men and officers. At the time of Fox's appointment there were about 2,000 men stationed there, with additional attachments at Charles Fort, Ballincollig, Skibbereen and six other stations.¹⁹ The stone barracks were located on Glanmere Road to the east of town and had only just been completed at the time Fox arrived there. Unfortunately, no provisions had been made for officers and their families. Fox and his wife and children found a house at 7 Montenotte Road not far from the barracks. Interestingly, Fox usually gave his address

¹⁵ International Exhibition of 1862: Official Programme (London: HMSO, 1862), p. 9.

¹⁶ See also: 'Scientific Aspects of the Exhibition of 1862', Home and Foreign Review (Jan 1863), 101-128.

¹⁷ Ceremonial to be Observed at the State Opening of the International Exhibition (London: HMSO, 1862), p. 7. See Fox, 'Primitive Warfare II', p. 425.

¹⁸ Hamilton, III, 321.

¹⁹ Harts Army Lists, 1858-68; PRO, WO 3/184, 17/1124, 30/113, 33/2A, 33/7, 44/120, 44/585.

simply as Montenotte, giving the impression it was a far grander location than it really was.²⁰

Fox's duties in Ireland were almost exclusively administrative, consisting of the ordering of equipment, the surveying of field positions and naval batteries, and the supervision of troops under the Division's authority. The Division was under the command of Major General H.K. Bloomfield, and included, in addition to Fox, a colonel of the Royal Artillery, a lieutenant-colonel and major of the Royal Engineers, an assistant adjutant general, and a fort major.²¹ Fox's position, while obviously a high-ranking one, carried little real authority and as a consequence left him with considerable free time.

One of his main duties was to report on coastal defences and shore batteries; an earlier report of one of his predecessors, Lieutenant-Colonel G.B. Shakespear, is among Fox's papers in Salisbury and Fox evidently used that as a model.²² The basic procedure was simply to record each battery using techniques common to military engineers and, no doubt, familiar to Fox since his Sandhurst days.²³ His findings, in turn, were plotted on the well-known Irish Ordnance Survey maps. Fortunately, the latter were scaled at 6 inches to the mile (those in England were still scaled at 1 inch to the mile) and were therefore extremely useful for an operation of that sort, as Fox's work was to demonstrate.²⁴

One of the most striking things about the Ordnance Survey maps of Ireland was that they included indications of ancient field remains and other sites of general interest. Fox himself estimated that for Munster alone there were over 10,000 field monuments recorded, pointing out at the same time that many of those had already been lost.²⁵ During the spring and summer of 1863, he apparently began to make a casual record of those remains he came across in the course of his other survey work, and, by at least 1864, he had begun to record them in detail as well. It was the first indication of Fox's field interests in Ireland, and it is interesting to note how such interests were in many ways simply an extension of his on-going work in ordnance. It was soon, of course, to become something far more absorbing.

²⁰ Henry and Coghlan's Cork Directory and Almanac, 1864-5 (Cork: Henry and Coghlan, n.d.), p. 176. He is listed as a resident of 'Montenotte' in the membership list ASL, RAI, A3:l.

²¹ Harts Army Lists, 1858-68; Henry and Coghlan's Cork Directory, p. 49. Samuel Lewis, A Topographical Dictionary of Ireland, 2 vols. (1837; rpt. London: Kennikat Press, 1970).

²² PRP, A4. Shakespear's report is dated 22/3/61.

²³ Standard Texts were W. F. Richard's Treatises on Mechanical Drawings ([London]: Printed by E. Jones, 1847); and James Fergusson's An Essay on a Proposed New System of Fortification (London: John Weale, 1849).

²⁴ See R.A. Skelton, 'The Origins of the Ordnance Survey of Great Britain', The Geographical Journ., 128 (1962), 415-26; J. B. Hartley, Introduction to Ordnance Survey Maps: A Descriptive Manual (Southampton: Ordnance Survey, n.d.); Freeman, pp. 30-31. T.A. Larcom (1801-79) of the Royal Engineers had been chiefly responsible for the Irish work.

²⁵ International Congress of Prehistoric Archaeology: Transactions of the 3rd Session (London: Longmans, Green, 1869), 316-17.

Another of Fox's activities during that period was his membership in the Cork Royal Institution. As with his field work, his involvement there was an extension of his other, more generalized scientific interests and again, the personality of Fox as a scientific amateur becomes clear. His main interest at Cork, however, was in the Institution's separate Antiquarian Society, perhaps as a direct response to the work he was doing on ancient field remains. Located in the Institution's rooms at Nelson's Place, the Society also included a small library and museum, and as at the Royal United Services Institution, a regular series of lectures.²⁶ The Society's collection was supplemented by a larger collection at Cork College, to which Fox made occasional reference in his later papers.²⁷ Among the Society's members were Thomas Hewitt, Thomas Wise and John Windell, all of them collectors, and, therefore, figures with whom Fox had something in common.²⁸

One of Fox's earliest Irish acquaintances was Hodder M. Westropp. A resident at the time of Rookhurst, near Cork City, Westropp was in many ways the typical Irish antiquarian. His earliest involvement in antiquarian work was as a collector, and he had published a standard work on painted Greek vases as early as 1856.²⁹ But, like Fox, his interests also extended to Irish field remains, and during the 1860s he was himself involved in making a record of local round towers, as well as of the 'rock carvings' or Ogham inscriptions often found in association with field remains.³⁰ Fox and Westropp apparently met at the Antiquarian Society, comparing notes on their findings and collections. Soon afterward they were to become more rivals than collaborators, first over the question of the origin of Westropp's 'rock carvings' and, later, over more complex problems in ethnology and anthropology. Whether their differences first became apparent in Ireland or later in London, where both were active in archaeological circles, is unclear.³¹

Another early acquaintance of Fox was Richard Caulfield (d. 1887). Again, a prominent member of local antiquarian and scientific societies, Caulfield up to this period had concentrated most of his attention on the literature. Typical of his contributions was his

²⁶ Henry and Coghlan's *Cork Directory*, p. 32.

²⁷ Fox, 'Primitive Warfare II, pp. 414, 420; *Catalogue*, p. 7.

²⁸ Fox mentions Windell and other Irish collectors in later publications: Fox, 'On an Ivory peg-top shaped object, Ireland', *PSAL*, 2dS, 3 (1866), 395. Also see *Catalogue*.

²⁹ Hodder M. Westropp, *Epochs of Painted Vases: an Introduction to their Study* (London: Walton and Maberly, 1856); also described in *Collectanea Antiqua in the Possession of Hodder M. Westropp* (Cork: Privately Printed, n.d.). In the same vein he later wrote *Handbook of Archaeology: Etruscan - Greek - Etruscan - Roman* (London: Bell and Daldy, 1867).

³⁰ Hodder M Westropp, 'On the Round Tower of Ardmore', *PRIA*, 10 (1867-68), 60; 'On Rock Carvings', *PRIA*, 10 (1867-68), 405. Westropp was also an active collector, exhibiting frequently in local societies as well as at the Society of Antiquaries in London. See *PSAL*, 2dS, 1 (1861), 411; 2 (1864), 377-9; and 3 (1865) 135.

³¹ Westropp apparently was the author of an anonymous article on 'The Ogham Inscriptions'; *The Ulster Jour. of Arch.*, 1 (1853), 101-05. For Fox's response, Fox, 'A Reply to Mr. Hodder Westropp's Paper on Ogham Pillar Stones in Ireland', *Transactions of the 3rd Internatl. Congress of Prehistoric Archaeology*, pp. 315-317; and 'On a Supposed Ogham Inscription from Rus-Glass, Co. Cork', *JESL*, NS, 2 (1870), 400-02. Fox, nonetheless, continued to consult Westropp well into the 1870s. See Fox, 'On a Flint Implement from the Isle of Wight', *PSAL*, 2dS, 5 (1871), 113-4.

article on 'The Journal of Thomas Dineley, Esq. and Some Account of his Visit to Ireland in the Reign of Charles II', published in the Journal of the Kilkenny and Southeast Archaeological Association in 1864³². As with Fox, however, he was also interested in field remains and by 1864 had started his own recording efforts in that area as well. He was also an enthusiastic collector, occasionally giving objects, including perhaps most significantly, a number of weapons, to the Royal Irish Academy in Dublin.³³ Fox and Caulfield apparently met soon after Fox's arrival at Cork, and together with the Rev. James Graves and John Windell, he served as one of Fox's principal guides as his interests in local archaeological matters first took root.³⁴ Along with Hewitt at the Royal Institution, Caulfield was also responsible for introducing Fox at the Kilkenny Archaeological Society, an organization to which Fox was elected in January 1864.³⁵

Caulfield and Fox began actively collaborating at an early date, possibly as early as 1863. By the summer of 1864, the two had made a first systematic survey of a number of forts, known locally as 'raths', in the immediate neighbourhood of Cork. A number of those were threatened by 'industrious and improving agriculturalists', as Caulfield put it, and it was obvious that both Fox and Caulfield saw their work as part of a salvage operation. Among the sites visited and recorded were Kilcrea Fort, which Fox had first seen as early as April of 1864³⁶, one called Lisna-ratha near Blarney, another called Luhulig, and another called Lis-Ard in the same area. Each monument was roughly similar, consisting of a steep bank and ditch, circular in plan, and, in some cases, containing a stone structure or chamber known as a 'souterain' in the centre. Copies of Fox's drawings are still among his papers in Salisbury, and they suggest that each consisted of site measurements and minor excavations, the latter usually to determine the extent of the earthworks. There was also room for speculation. In Caulfield's report, published in the Gentlemen's Magazine the following year, he compared the remains to those found also in Denmark and North America. A number of remains were also found at each site, including flint tools and animal bones at the latter two sites. Samples, of course, were retained for their collections.³⁷

During the following summer, that of 1865, Fox was on his own. That time he concentrated on the single monument known as Roovesmore Fort, located about half-way between Cork and Macrome just south of the River Lee. As with the raths examined the previous summer, Roovesmore consisted of a circular trench and dike about 130 feet in diameter. Inside was an elbow-shaped souterain formed by several uprights (osthostats)

³² Richard Caulfield and John Windell, 'Extracts from the Journal of Thomas Dineley, Esq. and some Account of his Visit to Ireland in the Reign of Charles II', Journ. of the Kilkenny and South-east Ireland Arch. Soc., NS 5 (1864), 40-48 and 268-90.

³³ PRIA, 4 (1849), 387-8; 5, (1850), 43.

³⁴ James Graves, Letter to Knight Watson, 4 Nov 1867, SAL, Correspondence files. Graves was equally interested in 'Stone inscriptions'. Also see John Windell, 'On the Gold Antiquities found in Ireland', The Ulster Journ. of Arch., 8 (1860), 36-54.

³⁵ Journ. of the Kilkenny and South-east Ireland Arch. Soc., NS 5 (1864), p. 3.

³⁶ SSW, PRP, Pl, Pla.

³⁷ 'Remains of the Aboriginal Inhabitants of Ireland', Gentleman's Magazine, NS 18, Pt. 1 (1865), 707-10.

and several cap-stones. The cap-stones were particularly unusual, and a number were inscribed with Ogham inscriptions similar to those noted earlier by Westropp and others. Since the site was threatened, as had been those of the previous year, Fox's concern was that at least the stones themselves should be removed and protected. Having 'successfully met with the prejudices of the inhabitants', who were reluctant to help out due to what he referred to as their 'superstitious dread', Fox managed to remove the stones to Cork. Soon afterward, arrangements were made with the Cork Steamship Company to transfer the stones to London and the British Museum.³⁸

Fox's record of his work at Roovesmore Fort, later published in detail in the Archaeological Institute's journal,³⁹ provides a fairly detailed picture of the scope and nature of his work of the time. Again, the project was essentially a recording operation; actual excavations played a relatively minor part in the total project. As a survey effort it again followed the standard procedure of military surveys of the period. Fox's own knowledge of the techniques involved, as suggested, probably stemmed from his Sandhurst years, having been refined, no doubt, as a result of his work on the ranges in Malta. Overall, his approach was fairly simple. The main instrument was a spirit level. Elevations were established simply by dropping perpendiculars at regular intervals. Thompson points out that this technique, fundamentally the same as that used for recording coastal lines and gun enplacements, was well adapted to the recording of irregular earthworks such as those encountered there and far more useful than the more detailed methods used by architectural surveyors.⁴⁰ Excavations were conducted in a haphazard way and apparently turned up very little. The only recorded relics are the cap-stones themselves.

When not actually recording or excavating, Fox was adding to his collection. In large part he again relied on local antiquarians and fellow collectors. James Graves of Kilkenny and Dublin, John Windell, Dr. John Neligan and Hodder Westropp in Cork all made contributions, either as sources or as conferees.⁴¹ 'An ivory peg top-shaped object' from Cork and two ring brooches, one from Lough Neagh and a second from Galway, were later described in short notices in the Proceedings of the Society of Antiquaries.⁴² Increasingly, however, Fox came to depend on excavations or other chance discoveries as

³⁸ AJ, 23 (1866), 149. Also see A. Steward Macalister 'On Some Country-Cork Ogham Stones in English Museums', JRSAI, 36 (1906), 166-78. Ogham inscriptions were much discussed in antiquarian publications of the period. In addition to Westropp there were offerings by John Windell, 'Ancient Irish Ogham Inscriptions', The Ulster Journ. of Arch., (1853), 43-52; P. W. Nash, 'On Irish Ogham Inscriptions', The Ulster Journ. of Arch., 2 (1854), 60-61; John O' Daly, 'Ogham Inscriptions: Evidence of their Antiquity', The Ulster Journ. of Arch., 3 (1855), 9-13; and John F. Shearman, 'On Some Inscribed Stones at Killeen Carmac, near Dunlavin', PRIA, 9 (1865), 253-60.

³⁹ Fox, 'Roovesmore Fort, and Stones inscribed with Oghams, in the Parish of Aghlish, County Cork,' AJ, 24 (1867), 123-39. Fox's own records are also found in SSW, PRP, P 2, 4, 6, 7 and 8.

⁴⁰ Thompson, General Pitt-Rivers, p. 46.

⁴¹ Fox, Catalogue. Neligan also sold a part of his collection at Sotheby's in 1852, and it is possible that Fox received some of his Neligan pieces later. BL, SSC.

⁴² Fox, 'Ivory peg-top shaped object'; 'On a Ring-Brooch from Lough Neagh, Ireland', PSAL, 2dS 4 (1868), 61-62. Windell and Graves are mentioned in the former article.

a supplement to the usual collector's network of dealers and buyers. Excavations at Christ Church, undertaken for the new church designed by William Burgess, yielded a number of Iron Age weapons in the autumn of 1862, or shortly after his arrival. A 'Human Heart found in a Wooden Box' turned up in the crypt the following year. An iron spearhead and a 'modern Irish skull' were discovered at Kilcrea Abbey in April 1864; an 'Irish skull of an extremely Elongated Form', at Cork Cathedral shortly afterward. As a result, new series were gradually taking shape. The human heart, for example, later served as a centrepiece of the series entitled 'Human Superstition'; the skulls formed the basis of a series on the development of human crania. In short, Ireland, with its wealth of prehistoric remains and other collectors, was offering Fox rare opportunities both for collecting and scientific experimentation.⁴³

3. First Interests in Archaeology

Because of his numerous and well-recorded activities in Ireland, there is a tendency to assume that Fox's career as a field archaeologist was in fact born there. Thompson points out that Fox showed no interest in field remains in Malta or Turkey, arguing that the Stanley letters say nothing of Fox's archaeological concerns prior to 1869, when Kay Stanley describes an excursion with her brother-in-law near Hampton Common.⁴⁴ Of course, the lack of evidence in itself cannot be considered conclusive. The earliest survey notes and drawings of an archaeological character at Salisbury, among the Salisbury Papers, for instance, appear to date no earlier than the spring of 1864 with Fox's first investigations at Kilcrea Abbey, and we know for certain that he was at least marginally involved in excavations in Ireland prior to that. (The excavations at Christ Church took place in 1862, or soon after his arrival at Cork.) Also, the Stanley letters are, if anything, conspicuous for their lack of material on Fox. The only information on Malta is in fact an oblique reference to the ranges,⁴⁵ and no mention is ever made of Fox's collection, which we know to have been an important interest throughout that period. Also, there are a number of more positive indications of his interest as well. Fox's description of an 'Iron Umbra Shield, discovered together with a spearhead and knife in an Anglo Saxon grave at Stowhurst near Bury St. Edmonds in 1851', suggests that he was either present at the time of discovery or in fact excavated it himself. A number of objects from York, turned up in the course of street excavations, also appear to date from that early period, although this is less certain.⁴⁶ As a collector he could not have overlooked the obvious advantages that excavations offered, as his Irish work alone suggests. It can be imagined, too, that the rich potential of the estates of his various country relatives, such as that of his uncle,

⁴³ Fox, 'Account of a human heart in a case found in Christ's Church, Cork', *AJ*, 24 (1866), 71-72; SSW, PRP; Fox, *Catalogue*.

⁴⁴ Thompson, *General Pitt-Rivers*, p. 45, referring to Russell, Amberley Papers, I, 279-80. Malta of course had been of interest to antiquarians since the early nineteenth century when Sir Richard Colt Hoare visited the island. A general guide had been produced by the 1830s. Henry Ponsonby, *The Historical Guide to the Island of Malta* (Malta: Government Press, 1830). The first systematic work began, however, only in the 1880s. See J.D. Evans, *The Prehistoric Antiquities of the Maltese Islands: A Survey* (London: The Athlone Press, 1971).

⁴⁵ Above, p. 60.

⁴⁶ Fox, *Catalogue*, pp. 15 and 18.

Edward Gordon Douglas, the First Baron Penryn near Bangor, or even more importantly, the Devonshire and Wiltshire estates of his great uncle and eventual benefactor, Lord Rivers, both sites of his 'later work, would not have been overlooked, even if actual excavations had to be put off for several more years. As an anonymous obituary in the Archaeological Journal [probably St. George Gray] revealed:

General Pitt Rivers has more than once told the writer of this notice how, when he visited the Rivers' property early in the 'fifties', and noticed the signs of abundant prehistoric remains, the thought flitted through his mind how desirable such an estate would be to an antiquarian of his tastes.⁴⁷

Other sites, it can be assumed, offered even more immediate opportunities.

It would not, of course, have been at all out of character for Fox to have participated in archaeological work at such an early date. First of all, archaeology was both an extension of and a complement to his other collecting interests. As a collector of limited means the attractions must have been even more manifest. Moreover, archaeologists and archaeology had become by this period something of a national craze. Encouraged in part by the large number of antiquarian remains turned up in the excavations for railways, canals and gas lines (or agricultural improvements as Fox's own later work at Kilcrea Fort demonstrated) and sustained by the general increase in the national wealth which underwrote the efforts both of collectors and field workers, the amateur archaeologist with his plus fours and spade was becoming a typical feature of the English holiday scene.⁴⁸ Correspondingly, memberships in the many both new and older archaeological societies increased tremendously during this period. The venerable Society of Antiquaries of London found itself 'inundated' with new nominations.⁴⁹ The newer, and in a sense more democratic, national organizations, such as the Archaeological Institute and the British Archaeological Association, could claim over 2,000 members by the late 1850s. Local associations proliferated as well. Between 1850 and 1860 over fifty regional antiquarian societies were formed, among them the Wiltshire Natural History and Archaeological Society, within which Fox was to play a prominent role.⁵⁰ That figure does not include the many literary, philosophical and mechanical societies which included archaeology as part of their general programme, the Cork Royal Institution being an obvious case in point. Finally, there was an appreciable proliferation of

⁴⁷ 'General Pitt-Rivers', Obituary Notice, AJ, 57 (1900), 174-5.

⁴⁸ Frank Hole and Robert H. Heizer, An Introduction to Prehistoric Archeology, 2nd ed. (New York: Holt, Rinehart and Winston, 1969), p. 12. The popularity of the subject is stressed in Forde-Johnston, pp. 46-48 and Stuart Piggott, 'Prehistory and the Romantic Movement', Antiquity, 11 (1937), 37. For the interdependence of factors see O.G.S. Crawford, 'The Dialectical Process in the History of Science', Sociological Review, 24 (1932), 165-73.

⁴⁹ Philip Henry Stanhope, Lord Mahon, 'Presidential Address', PSAL, 3 (1854), 95.

⁵⁰ Founded in 1854. JBAA, 15 (1859), 1. Fox's association came later, however, once he had inherited the Rivers' property. He was President from 1889-93. F.K. Annable, Curator, Devizes Museum, Personal Communication, 14 Jan 1980. Reports of local societies were featured in the Archaeological Journal and the Journal of the British Archaeological Association.

published material on the subject. C. Roach Smith had a monthly column in the Gentlemen's Magazine. The Athenaeum and Spectator included articles and antiquarian notes on a regular basis.⁵¹ Exhibitions, both local and national, were well attended and most local museums, several of which Fox obviously had visited, could claim at least a few archaeological pieces among their other varied collections.⁵²

The sudden interest in local antiquities was matched, in turn, by a new and in a sense complementary interest in the antiquities of the Near and Middle East. In part, the new interest resulted from the influx of materials alone, for by the 1850s Near and Middle Eastern remains had nearly supplanted Classical examples within most Antiquarian departments. The British Museum, itself a traditional bastion of Classical interests, had been overwhelmed with Near and Middle Eastern materials during the 1840s and 50s, largely as a result of the excavations of figures such as Henry Salt (1780-1827) in Egypt, Austin Henry Layard (1817-1894) and Henry Rawlinson in Persia. The Antiquities Gallery soon proved wholly inadequate, due to the rise in the number of visitors 'who', as one guidebook complained 'crowd the Museum on holiday occasions'.⁵³ The names of Khorsabad, Ninevah, Nimrod and Babylon, long familiar to a population immersed in the evangelical teachings of Low-Church Sunday schools, suddenly took on a new immediacy. Layard's Nineveh and its Remains, first published in 1849, achieved record sales, with over 9,000 copies sold during the first year. As Layard himself pointed out, that even surpassed Mrs. Rydell's Cookery.⁵⁴ Books on European antiquities such as J.A.A. Worsaae's The Antiquities of Primeval Denmark (1849), enjoyed a comparable

⁵¹ Stressed by Glyn Daniel, A Hundred and Fifty Years of Archaeology (Cambridge, Mass.: Harvard Univ. Press, 1976), p. 112.

⁵² For typical examples, see descriptions of collections such as those of the Literary and Philosophical Society, Newcastle and of the Museum Isurianum in Easingwold. Thomas Oliver, A New Picture of Newcastle Upon Tyne (Newcastle: T. Oliver, 1831), p. 66; Thomas Gill, Vallis Eboracensis (London: Simpkin, Marshall, 1852), p. 338. Stressed by Glyn Daniel, A Hundred and Fifty Years, p. 112.

⁵³ Bohn, p. 558. For a more detailed discussion of the growth of the British Museum Near and Middle Eastern collection and its impact on the public imagination, see Edward Miller, That Noble Cabinet: A History of the British Museum (London: Andre Deutsch, 1973), pp. 198-240. Vera Watson, The British Museum (London: Quartet Books, 1975) pp. 17-21; I.E.S. Edwards, 'Notable Acquisitions of Egyptian Antiquities in the Years 1753-1853', BMQ, 17 (1953), 14-16. C.J. Gadd, 'Assyrian Antiquities', BMQ, 18 (1953), 56-57; E.A. Budge, The Rise and Progress of Assyriology, (London: Hopkinson, 1925). On the general background to discovery see Seton Lloyd, Foundations in the Dust (London: Oxford Univ. Press, 1947); C.W. Ceram, The World of Archaeology (London: Thames and Hudson, 1966); Daniel, A Hundred and Fifty Years, pp. 69-90; and Origins and Growth, pp. 55-100.

⁵⁴ Cited Daniel, A Hundred and Fifty Years, p. 74, from 'Preface' to Austen Henry Layard, A Popular Account of Discoveries at Nineveh, Abr. ed. (London: John Murray, 1851). For further on his impact see Gordon Water field, Layard of Nineveh (New York: F.A. Praeger, 1968); And Nora Benjamin Kuble, Road to Ninevah (Garden City, N.Y.: Doubleday, 1964). Layard's most influential works included: Ninevah and Its Remains (London: John Murray, 1849); The Monuments of Nineveh (London: John Murray, 1849); Discoveries in the Ruins of Ninevah and Babylon (London: John Murray, 1853) and A Second Series of the Monuments of Ninevah (London: John Murray, 1853).

readership introducing many to the exciting discoveries taking place outside their own door.⁵⁵

The appeal of archaeology for someone like Fox, then, was obviously manifold. Already a passive archaeologist through his weapons collection, the sudden surge of activity during the 1850s could not have gone unnoticed. It was a healthy, invigorating activity, well suited to a sportsman and soldier like himself. It had the advantage of being simultaneously romantic and scientific, concurrent elements in Fox's later writings as with so many other antiquarians of his generation. The compelling 'gloom of bygone ages', as Fox later phrased it, was balanced, in a sense, by 'the practical discoveries of modern science'.⁵⁶ Archaeology was eminently 'realistic'. Its subject matter was dependable; artefacts, as Fox later stressed, 'cannot intentionally mislead us'. Mere 'speculation' or 'theory', in consequence were inadmissible.⁵⁷ The new archaeology, finally, had the advantage of novelty. No longer the dusty domain of antiquarians, archaeology was suddenly modern and scientific, with all that meant to a scientific amateur such as Fox. Like Giovanni Belzoni (1778-1823) or Mariette-Bey (1827-1881) of Egyptian fame, or Paul Botta (1805-1870) in the Middle East before him, Fox was attempting, therefore, to become an archaeologist in his own right. That his first holiday after his inheritance in 1880, should have been spent searching the banks of the Nile for ancient remains suggests something of the importance to him of the Near and Middle Eastern archaeological tradition at that early date and of its overall romantic appeal.⁵⁸

Although Fox was initially drawn to archaeology, therefore, for its popular and romantic overtones, it was the startling discoveries of 1859, and 1860, which were to have the greatest impact on his viewpoint and ambitions. The question of 'the Antiquity of Man', as Victorian writers portentiously phrased it, had been a subject of intermittent discussion, at least since the late eighteenth century.⁵⁹ In Britain, the suggestion that

⁵⁵ J.J.A. Worsaae, Primeval Antiquities of Denmark, trans. by W.J. Thoms (London: John Henry Parker, 1849). See Daniel, Origins and Growth, pp. 99-100.

⁵⁶ Fox, 'Primitive Warfare I', p. 612. On the romantic appeal, see W.H. Boulton, The Romance of Archaeology (London: Sampson, Low, Marston, n.d.)

⁵⁷ Fox, 'Primitive Warfare III'; cf. 'Evolution of Culture', p. 500.

⁵⁸ Fox, 'On the Discovery of Chert Implements', JAI, 11 (1881), 382-400. Belzoni's own account of his work is found in his Narrative of the Operations and Recent Discoveries Within the Pyramids, Temples, Tombs and Excavations in Egypt and Nubia (London: John Murray, 1820). Mariette-Bey was active in the 1850's and 1860's; see his Le Serapeum de Memphis, de courert et decret (Paris: Gicle, 1857); and Apercu de l'histoire ancienne d'Egypte (Paris: Denu, 1867). Bolta's work is described in Monument de Ninive decouvert per M.P.E. Bolta, 5 vols (Paris: Imprimerie Nationale, 1849-50).

⁵⁹ The story has been outlined many times. See Daniel, A Hundred and Fifty Years, pp. 30-80; Origins and Growth, pp. 110-120; G.C. Gillispie, pp. 185-90 and Penniman, A Hundred Years, pp. 70-72; J.C. Greene, The Death of Adam (New York: Mentor Books, 1959); H. Breuil, 'The Discovery of the Antiquity of Man', Huxley Memorial Lecture, JRAI, 75 (1945), 21-31; Casson; A.P. Oakley, The Problem of Man's Antiquity: An Historical Survey (London British Museum National History Department, Geology, Vol. 9, Bulletin 5). John Lyon, 'The Search for Fossil Man', Isis, 61, Part 1 (Spring 1970), 68-84, is probably the most comprehensive recent discussion. Also, P. Sharr, 'The Genesis of Prehistorical Research', Isis, 23 (1935), 425-43.

man's origins were contemporaneous with long extinct animals, thereby confuting the standard theological time reference of Archbishop Usher and other theologians, had first been broached in John Frere's famous article 'An Account of Flint Weapons discovered at Hoxne in Suffolk', published in *Archaeologia*, the principal journal of the Society of Antiquaries, in 1800.⁶⁰ Similar finds had been reported throughout the century. Father J. MacEnery discovered flints in the bones of rhinoceri and of bears beneath the stalagmite-covered floor of Kent's Cave near Torquay during the 1840s. MacEnery's findings, refuted by William Buckland (1784-1856), and voluntarily suppressed by MacEnery himself, were reaffirmed in 1846, by William Pengelly (1812-1894), a school teacher from Torquay who initiated his own excavations at Windmill Hill Cave, in Devon, reporting his findings at the Torquay Mechanical Institute during the late 1850s.⁶¹ The question, therefore, was well aired by the time of Fox's initial interest in archaeology, although nothing had as yet been accepted conclusively.

During the early 1860s, however, the fact of man's antiquity was finally put to rest. The principal figure was the Abbeville customs inspector and amateur archaeologist, Jacques Boucher de Crèvecoeur de Perthes (1788-1868). Basing his work, as John Evans since has emphasized, on the earlier excavations of his colleague, Dr. Casimer Picard, de Perthes argued that the stratigraphic record in the Somme Valley clearly indicated the presence of man at an early, although imprecisely established, date.⁶² His findings were first published in 1847, in his *Antiquités Celtiques et antédiluviennes*, the second volume

⁶⁰ John Frere, 'An Account of Flint Weapons Discovered at Hoxne in Suffolk', *Archaeologia*, 8 (1797), 204-05. Reprinted in Daniel, *Origins and Growth*, pp. 58-59. Also see J. Reid Moir 'A Pioneer in Palaeolithic Discovery', *Notes and Records of the Royal Society*, 2 (1939), 28-31. y,

⁶¹ J.W. Grubner, 'Brixham Cave and the Antiquity of Man' in Melford Spiro, ed., *Context and Meaning in Cultural Anthropology* (New York: Free Press, 1965); Daniel, *A Hundred and Fifty Years*, pp. 52-58. Pengelly's work, later supported by the British Association and Royal Society, was mentioned by Sir Charles Lyell, 'Presidential Address, Geology Section', *RBAAS* (1859), 93-95 and described in his own 'The Literature of Kents Cavern, Torquay', *Devonshire Association for the Advancement of Science*, 2 (1868), 469-75, 3 (1869), 191-205. For the final report see John Busk, John Evans, et al., 'Report on the Exploration of Brixham Cave', *PRS*, 20 (1873), 514-24; also recounted in W. Boyd Dawkins, *Cave Hunting* (London: MacMillan, 1874), pp. vii-xvi. Buckland was a noted and outspoken opponent of the non-Scriptural explanation of Mankind's origins. See his *Reliquiae Diluvianae*, or *Observations on Organic Remains, contained in Causes, Fissures and Diluvial Gravel* (London: John Murray, 1823).

⁶² Joan Evans, 'Ninety Years Ago', *Antiquity*, 23 (1949), 115-125. Again, de Perthes' work and importance for archaeology has been discussed many times and need only be summarized here. In addition to Evans, see Alcius Ledieu, *Boucher de Perthes, sa vie, ses oeuvres - sa correspondance* (Abbeville: Tugene Cal Prone, 1885), 1-48; R. Furon, 'Prehistory' in Rene Taton, ed., *Science in the Nineteenth Century* (London: Thames and Hudson, 1965); Forde-Johnston, pp. 50-55; and Daniel, *A Hundred and Fifty Years*, pp. 58-62; L. Aufrere, 'Essai sur tes premieres de couverts de Bouches de Perthe et les Origins d'archeologie primitive, 1833-44', in *Epreuves et Sytheses* (Paris: L. Staude, 1936); Aufrère, *Figures de préhistoriens: Boucher de Perthes* (Paris: Leroux: Presses Universitaires de France, n.d.); Adrien Joron, 'Boucher de Perthes est-il le fondateur de la Préhistoire', *Société d'Emulation Historique et Littéraire d'Abbeville* (1946), 328-345; Annette Laming-Emperaire, *Origines de l'Archeologie Préhistorique en France* (Paris: A. et J. Picard, 1964), 151-57.

of which appeared in 1852.⁶³ Eager to gain support of the established scientific community, de Perthes invited members of the French Academy to examine his sites. Only one convert, Dr. M.J. Rigollet (1786-1865) was forthcoming⁶⁴, however, principally, it would appear, because of de Perthes' generally offputting habit of self-advertisement—a habit, incidentally, which suggests something of Fox's later approach to archaeological discovery.

De Perthes' findings in the Somme basin had been followed closely by British archaeologists for a considerable time. There was a report in the Archaeological Institute's *Journal* by Gideon Algernon Mantell (1790-1852), in 1850; a second notice in 1851. Charles Roach Smith (1807-1890), of the rival British Archaeological Association, visited Abbeville in 1850, and persuaded de Perthes to visit London soon afterward. Finally, comparisons were made to Fere's earlier discoveries at Hoxne by Rev. Green J. Cheshire also in the *Archaeological Journal* in 1857.⁶⁵ But the main British involvement came only in 1858. In November of that year the geologist Hugh Falconer (1808-1865), who had previously reported on Pengelly's work at Brixton Cave, visited Abbeville, having heard of his findings at the Lyon Archaeological Congress the previous summer. Falconer was immediately convinced of the authenticity of de Perthes' discoveries and invited a number of British archaeologists to see the results themselves. In April 1859, John Evans (1823-1908), previously known for his work on Romano-British coins and later a close friend of Fox's, and Joseph Prestwich (1812-98), visited the site. As Evans later confessed, the Somme deposits made his 'ancient Britons quite modern' by comparison.⁶⁶ Prestwich, encouraged by Falconer, presented his findings at the Royal Society in May; Evans read a second paper, referring in fact to Frere's far earlier discovery, to the Society of Antiquaries soon afterward.⁶⁷ Discussed at the British Association meetings at Aberdeen in 1859 and at Oxford in 1860, at the time Fox became

⁶³ J. Boucher de Perthes, *Antiquites Celtiques et Antediluviennes*, 3 vols. (Paris: Treuttel et Wurtz, 1847-1864). De Perthes also issued his findings as *De L'Homme Antediluvien et ses Oeuvres* (Paris: Paris-Jung Treuttel, 1860), describing his contribution at length in his *Sous Dix Rois*, 8 vols. (Paris: Jung, Treuttel, 1863-1868). Picard's work can be found in 'Notice sur Quelques Instrumens Celtiques', *Memoir Société Royale d'émulation d'Abbeville* (1836-37), 221-68.

⁶⁴ M.J. Rigollet, 'Memoire sur des instruments et Silex Trovels á Saint Achel...', *Memoirs de la Société des Antiquaires de Picard*, 13 (1854), p. 23. Another convert was È. Littré, 'Etudes d'histoire primitive', *Revue de Deux Mondes*, 2dS 14 (1858), 5-32.

⁶⁵ Gideon Algernon Mantell, 'On the Remains of Man, and Works of Art Imbedded in Rocks and Strata', *AJ*, 7 (1850), 329; *AJ*, 8 (1851), 210; Greville S. Chester, 'Exhibit of a Weapon of Flint found at Hoxne in Suffolk', *AJ*, 14 (1857), 287. Other information based on previously cited accounts, particularly Joan Evans, 'Ninety Years Ago'.

⁶⁶ Cited Joan Evans, *Time and Chance* (London: Longmans, Green, 1943), p. 100; and Daniel, *Origins and Growth*, p. 67.

⁶⁷ Joseph Prestwich, 'On the Occurrence of Flint-Implements, associated with the remains of Extinct Mammalia, in Undisturbed Beds of the late Geographical period...', *PRS*, 10 (1859), 50-59; John Evans 'On the Occurrence of Flint Implements in Undisturbed Beds of Gravel, Sand and Clay...', *PSAL*, 4 (1859), 328-33. Also in *Archaeologia*, 30, Pt. 2 (1859), 280-307. Also see Prestwich's short note in *PSAL*, 2dS, 1 (1861), 374. On Prestwich's conversion see Grace Ann M'Call, *Life and Letters of Sir John Prestwich* (London: W. Blackwood and Sons, 1899), p. 119.

actively involved in archaeological societies during the early 60s the question of man's antiquity was still considered 'a subject of lively discussion', as Lord Houghton of the British Archaeological Association put it. In 1864 Lord Stanhope of the Society of Antiquaries called it 'the most popular and striking question of archaeology at the present time'.⁶⁸

For Fox, the Somme findings had the quality of revelation. It has already been suggested that Fox, like many of his generation, was open to a more scientific explanation of man's origins. Theology had long been dismissed by him as a kind of distorted history. As with de Perthes himself, the fact that such discoveries both contradicted and lent credence to the biblical record also had a certain iconoclastic appeal; de Perthes' own use of the term 'ante-Deluvian' was clearly intentional as Fox no doubt realized.⁶⁹ Fox by all indications followed the reports and ensuing controversy with considerable interest. Among his papers are a four-page manuscript referring to the stratigraphic record of the Somme discoveries. Lubbock's article of 1862 in the Natural History Review, cited in the manuscript, suggests, as Thompson has pointed out, that Fox's paper may have been written soon afterwards.⁷⁰

Fox later visited the Somme site and apparently saw both the collection and de Perthes, adding facsimiles of the Abbeville materials to his own collection.⁷¹ His excavations in the Thames Valley of 1866, were later fashioned after those of de Perthes, following both the approach and format of the by-then widely acclaimed French archaeologist⁷². But while no direct evidence of Fox's response at the time is recorded, something of the full impact of de Perthes' findings is found in his retrospective remarks at the Salisbury Archaeological Congress in 1887. Referring to the last congress held in that city, Pitt Rivers explained:

No individual amongst those who assembled here in 1849 had the least idea that beneath his very feet were to be found the relics of man's workmanship at a time when he was contemporaneous with the elephant, and other extinct animals. But the discoveries of M. Boucher de Perthes in the valley of Somme, were going on at that time, although they were not recognized by men of science until ten years later, when our countrymen, Mr. Evans and Mr. Prestwich, confirmed the

⁶⁸ Lord Houghton, 'Inaugural Address at the Leeds Congress', JBA 20 (1864), 3; Lord Stanhope, 'Presidential Address Anniversary Meeting', PSAL, 2dS 2 (1864), 396.

⁶⁹ Cf. Evans, 'Ninety Years Ago', p. 118.

⁷⁰ Thompson, General Pitt-Rivers, pp. 32-33; SSW, PRP, P 148. The article was 'On the Antiquity of Man, afforded by the Physical Structure of the Somme Valley', Natural History Review, 2 (1862), 244-69.

⁷¹ PSAL, 2dS 5 (1872), p. 269.

⁷² Fox, 'On Objects of the Roman Period found near the Old London Wall', AJ, 24 (1866), 61-63; 'A Description of Certain Piles found near London Wall and Southwark, possibly the Remains of Pile Buildings', AR 5 (1867), 71-82.

opinions of the French savant.⁷³

As with many others joining the antiquarian societies at the time, it was that confirmation which cemented Fox's own allegiance, and in the end, assured his commitment. His posting in Ireland simply provided him with the opportunity to make a contribution of his own.

4. First Archaeological Contacts

Fox was encouraged and to some degree aided in his first archaeological efforts by two very different figures: Henry Rawlinson, whom he knew through the Stanleys and the Royal Geographical Society, and Albert Way (1805-1874), a relative of the Stanleys. Rawlinson, it will be remembered, courted Maud Stanley for a number of years, and for a short time Lord and Lady Stanley were certain that the famous Assyriologist would marry their third daughter. In the spring of 1859, Rawlinson had accepted the post of Minister-Plenipotentiary to Persia, but during the early 1860s, or just prior to Fox's departure for Ireland, he was frequently present at the Stanley home where Fox had frequent opportunities again to meet with him, as he had earlier.⁷⁴

Rawlinson's interest in antiquities extended back at least to the time of his first assignments in India and Persia. He was first able to pursue his studies in an uninterrupted way, however, only in 1843, after assuming a non-military position as political agent of the East India Company in Turkish Arabia. As with the pioneering English Assyriologist Claudius Rich (1787-1820), before him, he was stationed in Baghdad.⁷⁵ His role allowed him a certain amount of leisure, and beginning in 1844 he undertook his major project, the transcription and decipherment of a Persian cuneiform inscription at Behistun. Situated on a cliff, over 400 feet from the ground, the project was obviously a hazardous one, and without the aid of a nimble Kurdish assistant, it could not have been successfully carried out. The full text was published by the Royal Asiatic Society in 1846. In 1849, he was granted £3000 by the British Museum to continue his explorations and in turn to add to the Museum's own collection of Assyrian antiquities.⁷⁶

⁷³ Pitt-Rivers, 'Presidential Address at the Salisbury Meeting of the Royal Archaeological Institute', Wilts. Arch. Mag., 24 (1887), 13.

⁷⁴ Nothing survives, unfortunately, of any possible correspondence between the two. Rawlinson's own letters are widely dispersed; those at the Royal Geographical Society include nothing from or to Fox. Rawlinson Correspondence and Papers, 1831-93, Royal Geographical Society; Archaeological Papers and Letters, Middle East Library, St. Anthony's College, Oxford. Rawlinson's life in England during the 1800s is discussed briefly in George Rawlinson, Memoirs of Major-General Rawlinson, Chapter IX and Mitford, Stanleys, pp. xviii, 195 and 259.

⁷⁵ Rich's work had laid the foundation of British Assyriological Studies; see Daniel, A Hundred and Fifty Years, pp. 70-72; Hole and Helzer, p. 7-8; Forde-Johnston, p. 52. On his contribution to the British Museum collections, see Miller, p. 202-3.

⁷⁶ Henry Creswicke Rawlinson, 'The Persian Cuneiform Inscription at Behistun'; Journal of the Royal Asiatic Society, 2 vols. (1846; rpt. London: John Henry Parker, 1846-49). See Daniel, A Hundred Fifty Years, pp. 73-75; Forde-Johnston, pp. 54-56; Gadd, p. 57; Miller, p. 213.

As a result of his work, Rawlinson became an instant celebrity. His accounts of his explorations and transcriptions were well received, and though he never published a work as popular as Layard's *Nineveh and its Remains*, his writings were widely known and distributed. Upon his return to England he was active in archaeological and geographical circles, serving as a trustee of the British Museum and as a commissioner of several colonial and Indian exhibits. Fox was obviously impressed by his example and referred to Rawlinson's works repeatedly, particularly during the late 1860s. Although notably 'imperious and abrupt' in manner, as one biographer put it⁷⁷, Rawlinson could be generous in support of those he liked. He was obviously in a good position to be of help to Fox in his own activities, as his nomination of Fox to the Geographical Society had already demonstrated.

Albert Way, Fox's other guide and mentor, was a very different type of person. The son of a barrister and landowner active in schemes for the conversion of Jews, Way was educated privately and at Trinity College Cambridge, where he received his B.A. in 1829. Never in good health, he turned to antiquarian pursuits at an early age and dedicated most of his time to the editing of a four-volume Latin-English dictionary. He was a noted collector, concentrating much of his attention on medieval seals and impressions. His election to the Society of Antiquaries came in 1839, and from 1842 until 1846, he served as a director. He played as well a central role in the formation of both the Archaeological Association and the Archaeological Institute, serving on the organizing committee of the latter for a number of years. His principal rival, C. Roach Smith, referred to him as the Institute's 'main prop'.⁷⁸

Fox once again knew Way through the Stanleys. Way was his wife's uncle through marriage, having married Emmeline Stanley, the sister of the second Lord, in 1844. Relations between the Ways and the Stanleys were never strong, however; Lord Stanley once referred to his brother-in-law as 'that prig Albert Way'.⁷⁹ As an active and worldly family, it is clear that the Stanleys were suspicious of Way's far more solitary antiquarian manners and made that clear in their correspondence and dealings with him.

⁷⁷ *DNB*; Obituary Notice, *Athenaeum* No. 3515 (Mar 1895), 313-14.

⁷⁸ Cited in Reginald E. Taylor, 'The Humours of Archaeology', 5, *JBAA*, NS 38 (1932), 189-90. Other biographical information on Way, based on *DNB*; Joan Evans, *A History of the Society of Antiquaries* (Oxford: At the Univ. Press, 1956); 'The Royal Archaeological Institute: A Retrospect', *AJ*, 106 (1849), pp. 2-4; and the Way Papers, SAL, and Way Correspondence, BL, M5/42728; Way was a frequent contributor at both the Archaeological Institute and the Society of Antiquaries and Director of the latter from 1842-46. See, for example, his 'Notes of Ancient Ornaments, Vestments, and Applications of Sacred Use, The Pax'. *AJ*, 2 (1845), 144-51. Among Way's other works are a number of exhibition catalogues including *Gloucester and Gloucestershire Antiquities; Catalogue of the Museum found at Gloucester* (n.p.: n.d.) and a *Catalogue of Antiquities, Works of Art and Historical Scottish Relics Exhibited in the Museum of the Archaeological Institute of Great Britain and Ireland* (Edinburgh: T. Constable, 1856).

⁷⁹ Lord Edward Stanley, Letter to Lady Henrietta Maria, 3 Jun 1856, Mitford, *Stanleys*, p. 131. Also see pp. xv, 6 and 137.

Although Way was essentially an antiquarian 'of the old school', as Joan Evans more recently put it⁸⁰, he was in close touch with the more recent developments in archaeology as well. Therefore, he had more in common with Fox than might at first be assumed. He was a staunch proponent of the scientific method, calling repeatedly for the 'need for more facts'. In his address to the newly established Archaeological Association, just prior to its split in 1845, he stressed the archaeologist's implicit reliance on the new geology. He called as well for the scientific arrangement of collections and increased reliance on classification as part of archaeology's programme. Through this means, he explained, 'Archaeology, even as regards Medieval relics, assumes the position of a refined science'.⁸¹ He was vehement, too, in his call for preservation, complaining of the threat posed by the destruction of railways; his influence on Fox in that regard can hardly be questioned. Finally, he was particularly drawn to the new discoveries concerning man's antiquity. In 1860 he delivered a brief talk at the Archaeological Institute on the Abbeville finds. He also helped set up an exhibition of prehistoric flints with Godwin-Austen, a geologist who had been closely involved with Pengelly's work at Brixton.⁸²

Way was, perhaps even more than Rawlinson, in a position to help Fox. As an avid collector, he was able to introduce his niece's young husband to other collectors and dealers, including Fox's early Irish contact, Thomas Hewitt. As an authority on Medieval remains, his own knowledge of antique weapons was invaluable, and he appears to have advised Fox on a number of occasions.⁸³ His personal collection included examples of weapons as well; in 1846, for instance, he lent a Saxon cross guard to the Society of Antiquaries for a temporary exhibition. But most importantly, Way was well placed within the archaeological hierarchy. It was through Way that Fox was first introduced to the Archaeological Institute and the Society of Antiquaries. Way also secured Fox's membership in the former and was one of Fox's sponsors for fellowship in the latter.⁸⁴ Fox was clearly appreciative. Way had provided his means of access.

5. Archaeology and the Societies

As with other archaeologists of the period, Fox's interests tended to focus on the several antiquarian societies. In Ireland, he was a member of the Cork Antiquarian Society, under the direction of Thomas Hewitt, and was less actively associated with the Kilkenny and

⁸⁰ Evans, 'The Royal Archaeological Institute', p. 2.

⁸¹ Albert Way, 'Introduction to Canterbury Meeting', *AJ*, 1 (1844), 1-6.

⁸² Albert Way, 'A Short Account of the Position and Geological Conditions indicated by the deposits, which, near Amiens, and Abbeville, have been found to contain the Works of Man', *AJ*, 17 (1860), 174-77.

⁸³ Thomas Hewitt, Letter to Albert Way, 27 Sep 1860, BL, MS 42728; Albert Way, Notes on Military costume addressed to 'Lane Fox' n.d., BL, MS 42728. See also Way's Engravings of Sepulchral Brasses in Norfolk, tending to illustrate the ecclesiastical, military and civil costume... 2nd ed. (London: H. G. Bohn, 1835); 'Illustrations of Medieval Manners and Costume from Original Documents', *AJ*, 4 (1847), 226-38, both of which deal with military arms.

⁸⁴ Certificate of Candidature, dated 13 Oct 1883, SAL. He was formally proposed on 7 Apr 1864 and elected 2 Jun 1864. My appreciation to A.F.R. Thompson, General Secretary, for first supplying this information. Personal Communication, 31 Oct 1979. Also, Committee Minutes, AI.

Southeast Ireland Archaeological Society (with headquarters in Kilkenny), later the Royal Archaeological Society of Ireland. He also took an interest in the Royal Irish Academy located in Dublin as did colleagues such as Westropp and Caulfield. But while Fox's immediate interests almost inevitably settled on the Irish societies, his long-term interests could be said to have focused on London, principally on the Society of Antiquaries and the Archaeological Institute. He was elected to the first in June 1864, having been nominated in October of the previous year. His candidature, presented on the basis of his 'attachment to the study of Antiquities especially ancient arms and armour', was supported by Albert Way, Augustus Oldfield, Henry Christy (1810-1865), Captain Arthur Tupper, Frederick Ouvrey (1819-1881), while John Evans and George Scharf (1820-1895) supported it on the basis of 'general knowledge'. His membership in the Archaeological Institute came in January 1864, although it is apparent that he was involved in both societies and probably attended their lectures at a far earlier date.⁸⁵ Meetings of both societies were open to the public, or at least to the acquaintances of members, and it is probable that Way or Rawlinson introduced Fox at an early period.⁸⁶ It is doubtful, too, whether Fox could have been elected to the Society of Antiquaries unless he had already been active or had made something of a name for himself as his certificate of candidature, of course, points out.

Fox was eventually active in both organizations, helping with exhibits, serving on membership committees, serving as vice-president at the Antiquaries between 1871 and 1874 (and again between 1891-3) and as President of the Institute for two non-successive terms in 1887 and 1897. He was obviously well disposed toward organizational work of that kind and in fact would become a well-known 'committee man', active at British Association meetings, various archaeological congresses and in a number of local societies including the Wiltshire Archaeological and Natural History Society. During the early sixties, however, he was just another society member. Stationed in Ireland his activities in both societies were also significantly curtailed, although never cut off entirely.

Of the two organizations with which he was to become involved, the Society of Antiquaries was clearly the more esteemed, and its membership the more exclusive. It had first been formed in 1717, and for many years was the only association of its kind.⁸⁷

⁸⁵ Certificate of Candidature, 13 Oct 1883. SAL. Committee Minutes, AI. Fox was elected to the latter on 28 Jan 1864.

⁸⁶ A.F.R. Thompson, Personal Communication 31 Oct 1979.

⁸⁷ See above, p. 118. An earlier society was founded around 1585 but did not survive. See Linda Van Norden, 'The Elizabethan College of Antiquaries', Diss. University of California at Berkeley, 1946. Other accounts of early British Antiquarianism are found in: Stuart Piggot, 'Stukeley, Avebury and the Druids', *Antiquity*, 9 (1935), 22-35; 'Prehistory and the Romantic Movement'; 'The Sources of Geoffrey of Monmouth', *Antiquity*, 15 (1941), 269-86, 305-19; William Stukeley: An Eighteenth Century Antiquarian (Oxford: At the Univ. Press, 1950); 'The Ancestors of Jonathan Oldbeck', *Antiquity*, 29 (1955), 150-56. Also; T.D. Kendrick, *British Prehistory* (London: Methuen, 1951); M.C.W. Hunter 'The Royal Society and the Origins of British Archaeology', *Antiquity*, 65 (1971), 113-21, 187-96; O.G.S. Crawford, 'Archaeological History: A Review', *Antiquity*, 25 (1951), 9-12. Daniel, *A Hundred Fifty Years*, pp. 18-48; The Idea of

A wide variety of interests had been represented from the first, ranging from the heraldry and autograph letters and genealogy to medieval architecture. A charter had been granted in 1751, and in 1774, the Antiquaries, who had previously depended on rented quarters, had been offered a permanent home in Somerset House, alongside the Royal Society. After a sudden surge of interest in the late eighteenth and early nineteenth centuries, due largely to the Widespread preoccupation with recent Hellenistic discoveries, the Society's membership had steadily declined, and its numbers, consisting mostly of country gentry and parsons, had fallen off almost entirely. Meetings of the 1830s, and during the secretaryship of Henry Ellis (1777-1859) of the British Museum, rarely attracted more than three or four visitors.⁸⁸

Circumstances had changed dramatically just prior to Fox's membership, due in large part to the reformist efforts of Philip Henry Stanhope, Lord Mahon (1805-1875), who was elected President in 1846. Mahon had quickly seen to the reorganization of the library, the reform of lending rules and the general refurbishing of the Society's Somerset House apartments. Many new interests were represented under his patronage as well, first with medievalists and then, to a lesser degree, with students of ancient British remains. In 1854, Mahon explained that the number of new fellows 'exceeded in number the losses ... from deaths or withdrawals' for the first time since the turn of the century.⁸⁹ Still composed largely of members of the landed gentry, the Antiquaries assumed a far more progressive reputation as well. At four guineas a year membership fees were still high⁹⁰, but admissions were more open, and, in consequence, membership figures continued to rise under Stanhope, elected President shortly before Fox's own candidature was approved. Weekly meetings, held Tuesday evenings from November to June, were well attended and the Society's facilities generally taken advantage of. Post-lecture discussions at 'the Dog' on Hollywell Street were notably lively in spite of the organization's supposedly August-tone.⁹¹

The Archaeological Institute, the second centre of Fox's archaeological interest, was of more recent origin and, not surprisingly, tended to have a far less genteel flavour. It had been first formed in 1844, together with its sister society, the British Archaeological Association, primarily as a response to the Society of Antiquaries' lethargy, particularly with regard to the preservation of prehistoric and Medieval remains which, both associations felt, the Antiquaries were ignoring.⁹² Instead of forming a single society,

Prehistory (1962; rpt. Harmondsworth, Middlesex: Penguin Books, 1971), pp. 7-30; H. B. Walters, The English Antiquarians of the 16th, 17th and 18th Centuries (London: E. Walters, 1934) among numerous other references. For the Society of Antiquaries in particular, see Joan Evans, Antiquaries; Edward William Brabrook, 'On the Fellows of the Society of Antiquaries of London', Archaeologia, 62 (1910), 59-80.

⁸⁸ Evans, Antiquaries, p. 239. On the interest in Greek Antiquities: M.L. Clarke, Greek Studies in England 1700-1830 (Cambridge: At the Univ. Press, 1945), pp. 175-206.

⁸⁹ Philip Henry Stanhope, Lord Mahon, 'Presidential Address', PSAL, 3 (1854), 95. See Evans, Antiquaries, 253-56, on Mahon's reforms.

⁹⁰ Bohn, p. 555. The admission fee was eight guineas.

⁹¹ Taylor, 'Humours of Archaeology', p. 184.

⁹² Evans, Antiquaries, p. 127.

however, the two groups had broken a year after their first congress at Canterbury, a well-publicized affair which, together with subsequent congresses, did much to promote antiquarian interests during the mid-nineteenth century. The main reason for the schism concerned the personalities of various officers: Thomas Wright (1810-1877) and C. Roach Smith were the representatives of the Association; Fox's wife's uncle, Way, of the Institute. As with the Ethnological and Anthropological Societies of a slightly later date, there was little overlap of membership. In fact, the tendency of the membership of each to blackball the other's nominations to the Society of Antiquaries caused the latter to pass a moratorium on the practice. Though the schism was due ostensibly to a disagreement over publication responsibilities, class allegiances probably had at least a part in the long-standing quarrel, as Reginald Taylor has pointed out.⁹³ Fox limited his membership to the more upper-class Institute, and most of his friends and associates would in turn be drawn from that organization, despite the fact that bad feelings among the two had been somewhat diminished by the time of his membership. As with the Antiquaries, meetings were well-attended, held monthly, however, rather than weekly, at far less lavish apartments situated on Haymarket Street. Beginning in 1863, or just before Fox became active, the Institute moved to new quarters in Burlington House.

Most of the London based archaeological societies tended to reflect the same changing pattern of interests, despite their varied attitudes or 'tone'. Classical studies, the mainstay of earlier antiquarians such as William Richard Hamilton (1777-1859), for many years President of the Society of Antiquaries, still persisted, particularly among the Antiquaries, but to a lesser degree. Greek and Roman antiquities, in turn, were of far less interest among the newer Archaeological Institute or British Archaeological Association, the membership of which tended to concentrate on antiquities 'of the early and Middle Ages' as the former's charter of 1861 specified.⁹⁴ Drawn by the inherent romanticism of those early sites, and their intimation of arcane mysteries and practices, antiquarianism had also taken on an implicitly nationalistic air by the fifties due, in large part, as Glyn Daniel has pointed out, to the relative isolation of British antiquarians during the Napoleonic Wars.⁹⁵ The newer antiquarians were also conscientiously pragmatic, concerned with salvaging ancient remains and with learning from the past. They were concerned, too, as one article pointed out, with 'the accumulation of facts [and] their classification'. By that means they could, as the same writer continued, 'almost claim to the rank of science'.⁹⁶ Ten years later, or the period when Fox was becoming active, the subject's claim to scientific recognition was even plainer.

⁹³ Taylor, 'Humours of Archaeology', pp. 188-89 and 222-23. Also, See Evans, 'The Royal Archaeological Institute', pp. 1-3.

⁹⁴ C.A. Radford, 'The Royal Charter', *AJ*, 118 (1961), 1-6. The society became 'Royal' in 1866 but it had little impact on its standing or organization. Also see Evans, 'The Royal Archaeological Institute', pp. 7-9.

⁹⁵ Daniel, *A Hundred and Fifty Years*, p. 54; *Origins and Growth*, p. 19.

⁹⁶ R.W., 'Introduction', *AJ*, 7 (1850); also see T.J. Pettigrew, 'On the Study of Archaeology and the Objects of the British Archaeological Association', *BAAJ*, 6 (1850), 163-171; Charles Newton, 'On the Study of Archaeology', *AJ*, 8 (1851), 1-26 and J.H. Marsden Disney, *Discussion*, *AJ*, 12 (1854).

One indication of archaeology's growing allegiance to science was the closer connection with geology, a trend which began in the 1840s but became even clearer in the 1860s, or again in Fox's time. Even relative traditionalists such as John Yonge Akerman (1806-1873), of the British Archaeological Association, extolled the virtues of geological study, conducting stratigraphic studies himself at Wayland's Smithy.⁹⁷ Lyellian uniformitarianism was almost universally embraced.⁹⁸ Not surprisingly, most antiquarians of the fifties and sixties were open as well to the question of man's antiquity. Exhibits of flint chips and the remains of extinct animals were common; articles on early tools and other prehistoric remains, generally labelled as 'primeval antiquities', were beginning to supercede all other interests. By the mid-1860s 'pre-history' had become probably the predominant subject among all three major societies, if the number of articles themselves might be used as an index.⁹⁹

Traditional antiquarian concerns, however, were not altogether excluded, and, judging from published articles on subjects such as medieval manuscripts, Renaissance gems and eighteenth-century Chinese porcelain were all of continuing interest.¹⁰⁰ Indeed, the striking factor is the very range of subjects published and discussed. It is clear too that the tradition of connoisseurship, generally associated with archaeologists of an earlier era, was never entirely suppressed. That was perhaps particularly true among the more conservative members of the Society of Antiquaries, for whom collecting remained, as it did for Fox, a major objective.

Arms and armour, still the most prominent part of Fox's collection, also remained important areas of interest among all the major societies. Papers on topics ranging from the history of the sling to descriptions of fourteenth century helmets were typical throughout the 1850s and 60s.¹⁰¹ Major collectors, such as Syer Cuming and Thomas Bateman (1821-1861), of the Archaeological Association or W.J. Bernard Smith and J.Y. Akerman of the Institute, frequently brought examples of their own collections to the monthly meetings.¹⁰² The index of the Archaeological Journal for 1862-63, or the years in

⁹⁷ John Yonge Akerman, 'Note on Wayland Smith's Cave', PSAL, 1 (1847), 179. Also see Gideon Algernon Mantell, 'On the Remains of Man and Works of Art', and Edmund Oldfield, 'Introductory Address', AJ, 9 (1852), 1-6.

⁹⁸ Daniel, Origins and Growth, pp. 85-87; A Hundred and Fifty Years, pp. 24-37. Lyell's own The Geological Evidences of the Antiquity of Man (London: John Murray) appeared in 1863.

⁹⁹ Typically referred to in the indices of all four major journals as 'Primaeval Antiquities'. See Archaeological Intelligence, AJ, 3 (1846). On the origins of the term 'prehistory', see Daniel, Origins and Growth, pp. 24-25; and A Hundred and Fifty Years, pp. 86-87. One of the first contemporary summaries was William Bell's, 'On the Prehistoric History of Great Britain', JBAA, 7 (1851), 132-40.

¹⁰⁰ Index, PSAL, 2dS, 2 (1862).

¹⁰¹ Walter Hawkins, 'On the Use of the Sling as a Warlike Weapon among the Ancients', PSAL, 1 (1846), 157; Brig-General Lefroy, 'Helmet of the Fourteenth Century, and Other Objects in the Royal Artillery Museum, Woolwich', AJ, 24 (1867), 315-17.

¹⁰² See Syer Cuming, 'On Weapons and Armour of Horn', JBAA, 3 (1847), 23-32; 'On the Drill and Drill-Bow', 6 (1850), 455-59, JBAA; 'On the Meri of New Zealand', JBAA, 10 (1854), 109-10; 'On Old English Arrow-Heads', 16 (1860), 262-68, JBAA. For Thomas Bateman, see JBAA, 7 (1851), 325-26; JBAA, 12 (1856), 201-02, for various exhibits. For W.J. Bernard Smith, see

which Fox was first becoming most interested, includes entries for oriental arms, Japanese swords, swords from Dresden and Ferrara and Spanish plate armour. Articles and exhibits centring on more recent arms were typical as well. In 1848, for example, Thomas Wright spoke on the subject of recent improvements in artillery. In 1853, J. Bernard Smith discussed changes in firearms. In 1860, A.I. Pritchard exhibited a series of gun locks of different periods, and two years later Charles Reed exhibited 'some modern firearms'.¹⁰³ More complete were John Hewitt's 'Notice of the Combined use of the Match-lock and the Flint-lock, in the Progressive Improvements in Fire-Arms' published in the Archaeological Journal for 1858-60, and J.Y. Akerman's 'Notes on the Origins and History of the Bayonet', published in the Proceedings of the Society of Antiquaries four years later.¹⁰⁴ Both were used by Fox for reference during the formation of his own bayonet series.¹⁰⁵

It is obvious that Fox's own interests were not at all out of place among antiquarians of the period; and it is likely that the popularity of such subjects, as well as the presence of other weapons collectors within the several societies, were at least in part what initially attracted him. A number of his friends and early acquaintances were involved as well. John Latham from Wilkinson's, for example, with whom Fox had worked at Woolwich, was a frequent contributor to several journals. Godfrey Fausett (1829-1877), Charles Reed, and most importantly Captain Arthur Chilver Tupper, all of whom served on the Museum Committee at the United Services Institution, were also all active antiquarians.¹⁰⁶ Fox himself was nominated to the Society of Antiquaries on the basis of his interest in weapons, and it is evident that many of his own first efforts were concentrated in that area as well. Even later contributions to the Society of Antiquaries lectures, including his exhibition of match-locks 'showing successive improvements in their manufacture', followed closely in that tradition.¹⁰⁷

It is unfortunate that no direct evidence survives the character of Fox's involvement during those early years. Albert Way, we know, introduced him to other collectors, and it is clear that Way's long-time associate J. Bernard Smith, a well-known arms collector,

various exhibits, AJ, 11 (1854), 381 and 12 (1855), 89, 187, 203, 287, through AJ, 20 (1863), 77, 201, and PSAL 2dS, 3 (1867), 453-54. Akerman's most comprehensive article on weapons is found in Archaeologia: 'On some of the Weapons of the Celtic and Teutonic Races', Archaeologia, 34 (1852), 171-89.

¹⁰³ Thomas Wright, Response to Joseph Hunter's article on 'Proofs of the Early Use of Gunpowder in the English Army', PSAL, 1 (1848), 273-76; J. Bernard Smith, 'Exhibit of Firearms', AJ, 11 (1853), 381; R. Pritchett, 'Exhibit of photographs representing gun-locks', PSAL, 2dS, 1 (1860), 176; Charles Reed, 'Exhibit of Modern Firearms', PSAL, 2dS (1868), 361.

¹⁰⁴ Even earlier was Robert Porrett's exhibition of 'Specimens illustrative of the progressive improvements in the construction of gunlocks', PSAL, 1 (1845), 78. John Hewitt, 'Notice of the Combined Use of the Match-lock and the Flint-lock, in the Progressive Improvements in Firearms', AJ, 17 (1860), 224-26; J.Y. Akerman, 'Notes on the Origin and History of the Bayonet', PSAL, 2dS 1 (1860), 145, and Archaeologia, 37 (1860), 423-30.

¹⁰⁵ Fox, Catalogue, pp. 183-84.

¹⁰⁶ PSAL, 2dS 1 (1860), 145.

¹⁰⁷ Fox, 'Remarks on a XVII Century Matchlock from Inverness', AJ, 27 (1870), 134-35.

maintained at least a professional acquaintanceship with Fox.¹⁰⁸ Arthur Tupper and Fox were evidently close friends and collaborators, particularly just before and after Fox's stay in Ireland. Both were active in the United Service Institution and were elected to the Society of Antiquaries at nearly the same time; Tupper, whose own fellowship dated only a year before that of Fox's, was one of those who supported Fox's candidature from personal knowledge. Their introduction to archaeology was also strikingly similar. Both began as arms collectors, later turning increasingly toward excavations. As with Fox, Tupper would make a pilgrimage to Abbeville, reporting on his findings to the Society of Antiquaries. He also later helped Fox organize the Society's 'Neolithic Exhibition' of 1871, as well as other special exhibitions. The progression, therefore, was evidently not at all an unusual one.¹⁰⁹

Ireland was also a continuing area of interest among British antiquarians of the period. That was perhaps even more true among the archaeologists of the early sixties, concerned as they were with prehistoric remains, particularly those of local origin. Ireland, as the home of the Celts and as the figurative refuge of the ancient Britons, was an ideal focus of interest. With its bountiful earthworks, forts, tumuli and other monuments, it was a perfect place to conduct field investigations—and to build up collections—as Fox's own experiences in particular had demonstrated. As a result, students of Irish antiquities were plentiful among all three of the London-based antiquarian societies. Many held dual memberships in the Royal Irish Academy in Dublin. Interestingly, most of the higher-ranked antiquaries had an Irish connection as well. The Institute could claim Lord Mahon [Philip Henry Stanhope] along with Lord Londesborough [Albert Dennison [Conyngham]] (1805-1860) and Lord [James] Talbot de Malahide (1805-1883). The British Archaeological Association's President for many years was Lord Conyngham. Overall, the Irish antiquaries represented an aristocracy among antiquarians, and though criticized by Fox at the time of his work there for their inactivity and their 'spirit of political faction rather than desire for truth', they would continue to play a dominant role in archaeological activities well into the second half of the century.¹¹⁰

Fox, by virtue of his published accounts of his first excavations and his own early field work, might be said to have entered archaeology through Ireland, and for several years he was generally associated with that faction. His connections with local Irish antiquaries remained strong as well. He evidently remained in contact with collectors such as James Graves of Kilkenny and John Windell of Cork as late as 1867. (Caulfield, however, appears to have disappeared from the scene.) Hodder Westropp remained an important contact and later played an active part in the activities of both the Ethnological and Anthropological Societies as did Fox.¹¹¹ Finally, Fox's Irish connections, and, even more

¹⁰⁸ See PSAL, 2dS 1 (1860), 45 and comments on Fox's 'Remarks', AJ, 27 (1870), 135-38.

¹⁰⁹ PSAL, 2dS 1 (1860), 145; SAL, Executive Committee Minutes 43, 2 Apr 1864; PSAL, 2dS 3 (1867), 145, PSAL, 2dS 4 (1869-70), 245, 446 and 511, PSAL, 2dS 5 (1870-72), 11, 229 and 257.

¹¹⁰ Trans. of the 3rd Session of the Internatl. Congress of Prehistoric Archaeology, pp. 316-17.

¹¹¹ Westropp was active at the Archaeological Institute from 1864. See 'Engravings of Etruscan Palstones and a Celt of Bronze in a Collection Mr Westropp of Cork', AJ, 21 (1864), pp. 100-04. Among his Irish contributions were: 'On the Fanaux de Cimitieres and Round Towers', PRIA, 7

importantly, his collection of Irish antiquities, brought him into contact with Way's close friend, John Obadiah Westwood (1805-1893) the well-known entomologist and authority on Irish art and ornament. Westwood's papers on the derivation of ornamental design had a profound effect on Fox's work and may well have inspired Fox's ornamental series within his collection. Also, Westwood, as Hope Professor of Zoology at Oxford in 1859, would later play an important role in convincing Fox to donate his collection to Oxford's new natural history museum rather than elsewhere.¹¹²

6. New Contacts Within the Antiquarian Community

While Fox was accepted among the more established antiquarian community because of Ireland and his collecting interests, it is evident that his main sympathies lay with the newer school of prehistorians. For one, his collection had the greatest appeal to that group. Secondly, his own excavations naturally brought him into contact with other more active field workers, who, almost as a matter of course, were recruited from the prehistoric camp. Finally, the new prehistorians were caught up in the excitement over the confirmation of man's antiquity and tended, as did Fox, to relish the explicit modernism of their cause. The prehistorians, in effect, were introducing 'science' to the subject.

One of Fox's closest friends within the newer prehistorian community was John Evans. As we have seen, Evans too began as a traditional antiquarian. A member of both the Archaeological Institute and the British Archaeological Association, and in fact one of the few able to bridge the gap, Evans had first concentrated on British coins and Medieval manuscripts. His first major paper was published in the Numismatic Chronicle in 1850, and was entitled 'On the Date of British Coins'. Early contributions to the Proceedings of the Society of Antiquaries included a discussion of the Loseley manuscripts and a selection from the surviving letters of the Queen of Bohemia.¹¹³

(1864), 197-97; 'On the Pre-Christian Cross', PRIA, 7 (1863), 322-24; 'On the Tribal System and Land-Tenure in Ireland Under Brehon Laws', JESL, NS 2 (1870), 342-56; 'On a Lantern at Fanal on St. Catherine's Down', PRIA, 2dS 1 (1872), 141-42. His later contributions included 'On Phallic Worship', JASL, 7 (1869), cxxxvi-cxliii; 'On Analogies and Coincidences Among Unconnected Nations', JAI, 1 (1871), 221-25; 'Notes on Fetishism', JAI, 9 (1879), 304-10. Graves and Windell are mentioned in PSAL, 3 (1867); Neligan is discussed in Fox's 'On a Ring-Brooch from Lough Neagh, Ireland', PSAL, 4 (1868), 61-62. Caulfield's last contact is in 1870 with his 'Note on a Supposed Ogham Inscription from Rus-Glas, Co. Cork', delivered at the Ethnological Society of London, JESL, NS 2 (1870), 300-01; Fox took part in the discussion.

¹¹² See, for example, Westwood's 'On the Peculiarities Exhibited by the Miniatures and Ornamentation of Ancient Irish Illuminated MSS', AJ, 7 (1850), 17-25; 'On the distinctive character of the various styles-of ornamentation employed by the early British, Anglo-Saxon, and Irish Artists', AJ, 10 (1853), 275-301; 'On the Importance of making a collection of Rubbings of the Inscribed Stones of Ireland', PRIA, 6 (1854), 77-80. Cf. 'Mummy Beetles', RBAAS (1860), 123.

¹¹³ John Evans, 'On the Date of British Coins', The Numismatic Chronicle, 12 (1849), 127-137; 'On the Loseley MSS: The Letters from the Queen of Bohemia', PSAL, 4 (1857-58), 21, 26, 28-29, 180. Evans was active at the Archaeological Institute from 1845 and at the Society of Antiquities from 1852. Biographical material on Evans based on entries in DNB; Joan Evans,

Though he had been long interested in geology (and was in fact something of an authority in that field as a result of his familiarity with the canal construction on which his uncle's paper industry was dependent) Evans' conversion to the new scientific archaeology would wait really until his trip to Abbeville in 1859. From then on his work took on a decidedly different character, although he never gave up his study of British coins. In 1859, he gave his first paper on Abbeville flints, and within three years he had become the leading authority in the area, often exhibiting material from his own and other collections at meetings and adding to the discussion at the Institute's many exhibitions of the 1860s and 70s.¹¹⁴ Despite Evan's mercantile background—he would remain active in the family-run paper business until 1885—Fox and he soon struck up a friendship, and would work closely together, particularly on society business, over the next few years.

Another of Fox's new colleagues among the prehistorians was Augustus Wollaston Franks (1826-1897), then the Assistant Keeper of Antiquities of the British Museum and a prominent member of both the Society of Antiquaries and the Archaeological Institute.¹¹⁵ Franks and Fox apparently met sometime during the late 1850s, either through one of the archaeological societies or as a result of Fox's interests in the British Museum's various collections, (Franks was also present at the Sotheby and Christie sales and they may have met there as well). Franks himself was an authority in a number of areas, ranging from Chinese porcelain and majolica ware to Irish metal work, and it is apparent, at least at a later date, that Fox relied on Franks' opinions when adding pieces to his own collection. It is certain that Franks helped to engineer the reception of Fox's Ogham stones at the British Museum in 1865.¹¹⁶

As with his close friend Evans, Franks had first become active in antiquarian circles during the 1840s. While an undergraduate at Cambridge he had made a name for himself as an authority on sepulchral brasses, spending much of his leisure time scouring local churches for good examples. He was one of the founders of the Cambridge Archaeological Society and an early member of the Cambridge Antiquarian Society, the

Antiquaries, 327-30; Time and Chance; and Obituary Notice, Athenaeum No. 4206 (6 Jun 1908), 704-05.

¹¹⁴ Evans, 'On the Occurrence of Flint Implements in Undisturbed Beds of Gravel, Sand and Clay'. See above. Other contributions in the field included: 'An Account of some further discoveries of Stone Implements in the Drift'; 'On some Discoveries of Worked Flints near Jubbulpore, in Central India', PSAL, 2dS 3 (1865), 39-44. For his contributions at the Archaeological Institute, see AJ, 17 (1859-60), 172, AJ, 25 (1867-68), 151-53, AJ, 27 (1869-70), 92. Evans also had an interest in Irish antiquities. See 'On some discoveries of Stone Implements in Lough Neagh', Archaeologia, 41, Pt. 2 (1867), 397-408. 'An Account of the Nuclei of a dark buff Flint from Pressigny le Grand, Poitou', PSAL, 2dS 3 (1864), 166. His findings were later compiled in The Ancient Stone Implements, Weapons and Ornaments of Great Britain (London: Longman, Longman, Green, Reader and Dyer, 1872). See also PSAL, 2dS 22 (1908), 469.

¹¹⁵ Biographical information on Franks from DNB; Evans, Antiquaries, 346-49; Thomas Kendrick, 'The British Museum and British Antiquities', Antiquity, 28 (1954), 138-39; Miller, pp. 194 and 313; and Brabrook, 'Fellows of the Society of Antiquaries', pp. 77-78.

¹¹⁶ British Museum, Books of Presents, 1866-68, f. 94. Donated 10 May 1866. I am grateful to Jill Swart and Malcolm MacLeod for their assistance on Fox's contributions. Personal Communication, 27 Mar 1980. AJ, 23 (1867); and Fox, 'Roovesmore Fort', pp. 123-39.

secular successor to the High-Church Camden Society. After Cambridge he had committed himself to the fledgling Archaeological Institute and, indeed, was one of its earliest and most active members. He was elected a Fellow of the Society of Antiquaries in 1853, and served as Director for a nine-year period from 1858 on.¹¹⁷

Unlike most other archaeologists, including Fox at the time, Franks was in the fortunate position of having an independent income. That was more or less a prerequisite during the period for anyone devoting himself full time to antiquarian pursuits, as Franks did; his salary at the British Museum was certainly inadequate to support his activities or even provide a livelihood. Franks had first come to the attention of the British Museum through his work in setting up an exhibit of medieval antiquities for the Society of Arts in 1851. His energies were, after his appointment, quickly directed to the British Museum's own collection, seeking out donors and regularly adding to the Museum's medieval and 'ancient British holdings', often out of his own pocket.¹¹⁸ Accessions were regularly reported in the journal of the Archaeological Institute, and Franks frequently displayed new objects both there and at the Society of Antiquaries.¹¹⁹ While he was never a field archaeologist as Evans and Fox were, Franks was well aware of the value of those activities and, largely through his position at the British Museum, did much to promote field investigation. He had discussed flint tools and chips as early as 1856, already warning collectors about forgeries.¹²⁰ As Keeper of the newly-organized Department of British and Medieval Antiquities and Ethnography after 1866, his expertise was given full recognition. In a fundamental sense, however, he remained a collector and 'connoisseur', and was probably the first to bring a discerning collector's eye to the ethnographical collections.¹²¹ Together with Fox, he later became one of the first to emphasize the complementary value of the latter for the study of prehistoric antiquities.

Perhaps the most distinguished of Fox's new archaeological colleagues was Sir John Lubbock, Fourth Baronet of Lammos, Norfolk, and later Lord Avebury (1834-1913). Lubbock was a considerably younger man than Fox, but clearly made up for that through

¹¹⁷ Evans, *Antiquaries*, p. 346; AI, Committee Minutes; SAL, Executive Committee Minutes. Among Franks' book-length publications were *A Book of Ornamental Glazing Quarries* (London: John Henry Parker, 1849); *On Recent Excavations and Discoveries on the Site of Ancient Carthage* (London: J.B. Nichols and Sons, 1860); *Inscriptions in the Himyaritic Character discovered chiefly in Southern Arabia* (London: Trustees of the British Museum, 1863); and *Catalogue of a Collection of Oriental Porcelain and Pottery* (London: Science and Art Department of the Committee of Council on Education; George E. Eyre and William Spottiswoode, 1876).

¹¹⁸ Miller, p. 212.

¹¹⁹ Beginning in 1852. See Franks, 'The Collection of British Antiquities in the British Museum', *AJ*, 9 (1852), 7-15. They were afterwards summarised annually. See 'The Additions to the Collections of National Antiquities in the British Museum', *AJ*, 10 (1853), 1-13; 'The Additions to the Collections of National Antiquities in the British Museum', *AJ*, 11 (1854), 23-32; etc.; and *PSAL*, 3 (1854), 118-20 *PSAL*, 2dS 3 (1866-67), 83-94, 233-42, 435-42 and *PSAL*, 2dS 4 (1868), 128-34.

¹²⁰ Franks, Letter to Secretary accompanied by two fabricated implements, *PSAL*, 4 (1856), 4-5.

¹²¹ See H.J. Braunholtz, 'History of Ethnography in the Museum after 1753 (Pt. I)', *BMQ*, 18 (1953), 91.

his connections and experience. Given a classical education at home and Eton, he had entered the family banking business at the age of fourteen. A precocious student, he had come under Darwin's influence at an early age when his father had persuaded Darwin to act as the boy's tutor. Although that arrangement was interrupted by his banking career, Lubbock remained active in scientific work and was elected to the Royal Society while still in his twenties. His interests covered a large span of topics, ranging from the origin of Danish kitchen middens to the life cycle of insects, although it was in the latter field that he would make his most important contributions.¹²² Active in politics as well, he would later serve as the member for Maidstone and for many years held a seat for the University of London. A 'pronounced liberal', as one biographer put it¹²³, he became noted for reformist measures, such as early closings and the Bank Holiday; the latter, passed in 1871, was known for a short period as 'St. Lubbock's Day'. He was also the main supporter of the Ancient Monuments Act of 1882, the first legislation providing for a national listing of prehistoric and other remains, working closely with Pitt Rivers in its implementation.

Lubbock had been first introduced to archaeology through his early interest in geology. Through Darwin he had become acquainted at an early age with Lyell and Sedgwick, and in 1859 went with Falconer to view the famous Abbeville finds.¹²⁴ He was nominated to the Society of Antiquaries in 1863, and was elected in the spring of 1864, or on the same day as Fox. A talented scientific writer, Lubbock made his first archaeological contribution through a series of articles in the Natural History Review, a journal of which he was editor, and possibly the principal backer, for a number of years.¹²⁵ Those were published and condensed in 1865 under the title of Prehistoric Times.¹²⁶ The book was a considerable popular success, and through it Lubbock became known in most people's estimate the leading authority in the field. It was in large part through Lubbock's book that the term 'prehistory' gained popular acceptance.¹²⁷

Fox and Lubbock were obvious allies. They shared a similar background, and, at least for a time, had the same political outlook. Both were scientific and modern in their views, broadly reformist, yet inherently conservative. Both broke with traditional religion while

¹²² John Lubbock, The Origin and Metamorphoses of Insects (London: Macmillan, 1873). Ants, Bees and Wasps: A Record of Observations on the Habits of Social Hymenoptera, 17th ed (London: Paul, 1929). Biographical information on Lubbock based on DNB entry; Arthur Keith, 'Centenary of the Birth of Lord Avebury', Man, 34 (1934), No. 65, 49-51; Horace G. Hutchinson, Life of Sir John Lubbock, 2 vols. (London); and Adrian Grant Duff, ed., The Life-Work of Lord Avebury (Sir John Lubbock) 1834-1913 (London: Watts, 1924). Also, Keith, The Life Work of Lord Avebury (London: Watts, 1934).

¹²³ DNB, p. 346.

¹²⁴ 'On the Evidence of the Antiquity of Man afforded by the physical structure of the Somme Valley', Natural History Review, (1862). See also Ledieu, p. 69; and Keith, 'Lubbock', p. 50.

¹²⁵ Grant Duff, 74-79; Anon Rev. of John Lubbock's Prehistoric Times, AR, 3 (1865), 336; Thompson, General Pitt-Rivers, p. 33.

¹²⁶ John Lubbock, Prehistoric Times (London: Williams and Norgate, 1865).

¹²⁷ Daniel, Origins and Growth, p. 2. Lubbock's work was later expanded under the title of The Origin of Civilisation and the Primitive Condition of Man (London: Longmans, Green, 1870). See also Peter Rivière 'Introduction' to 1978 rpt. (London: Univ. of Chicago Press, 1978).

remaining superficially active. Both argued for social and political reform, yet were cautious in its application. Both, also, were popularizers, Lubbock through his works on moral philosophy, such as The Use of Life (1894) and Peace and Happiness (1909)¹²⁸, Fox through his two museums and popular lectures. The two met socially and professionally and worked closely together on various commissions and committees.¹²⁹ In 1871 they helped to forge the Anthropological Institute. Finally, Fox's second daughter, Alice, became Lubbock's second wife, making Lubbock, in effect, Pitt Rivers' son-in-law.

Such was, then, the new school of archaeologists to which Fox attached himself during the early and middle 1860s. It was obviously an exciting period. The startling verification of man's antiquity, Darwin's implicitly related work on biological evolution, the sudden surge in field activities and the resulting influx of new materials, all had a profound effect upon Fox, assuring, in a sense, the direction of his future commitment. For the first time, too, his collection had a specific purpose: to illustrate and shed light on the findings of the new archaeology. First through his Irish excavations and later through his involvement in London and Sussex, his collection would take on a slightly different character as well. No longer made up solely of antique arms and, essentially complementary, exotic pieces, increasingly Fox's collection came to include prehistoric materials as part of its total composition. At the same time it approached more closely other archaeological collections in its aim and scope.

7. Archaeology and Museums

Museums and the contents of museums had, of course, long been important to archaeologists, by the time of Fox's initial involvement. In the broadest sense, archaeology could be said to have been organized around the idea of the museum. Meetings of the Society of Antiquaries were dominated even at an earlier date by exhibitions of various kinds. Descriptions of collections or individual pieces had been one of the main components of many of the several archaeological journals. During the middle part of the nineteenth century such a preoccupation became, if anything, even more pronounced, in part, it can be said, for many of the same reasons which determined Fox's own collecting interests. Reflecting on the habits of his colleagues, Talbot de Malahide pointed out in 1850 that 'the advantageous effects, in bringing to view so freely numerous treasures of antiquity and art ... tended essentially to advance the scientific character of archaeology'. The Society of Antiquaries followed his dictates and made the exhibition of objects even a more formal part of their programme.¹³⁰ A substantial increase in the number of archaeological publications and the availability of woodblock prints and inexpensive lithographic reproductions further helped to promote the same

¹²⁸ John Lubbock, The Use of Life (London: Macmillan, 1894); Peace and Happiness (London: Macmillan, 1909). Also see Addresses, Political and Educational (London: Macmillan, 1878), and Essays and Addresses, 1900-1903 (London: Macmillan, 1903).

¹²⁹ Both were elected to the Society of Antiquaries on the same day. PSAL, 2dS 3 (1865), 113-14.

¹³⁰ Talbot de Malahide 'Presidential Address', AJ, 7 (1851), 209; Council Notes, PSAL, 1 (1843), 1.

ambition.¹³¹ Sustained and encouraged by the example of natural history collections and by the growing availability of the materials themselves, the museum, in turn, was assuming a new kind of authority. As John Mitchell Kemble (1807-1857) one of the founding members of the Archaeological Institute recognized: 'We are but collectors, even as our predecessors were; but we are collectors with a definite purpose, ...'¹³² By the late 1860s when Fox became active in archaeological circles and had first begun to bring his collection to the attention of other antiquarians, that understanding had become even more firmly implanted.

The idea that museums might serve as an archaeological research tool, as Fox later understood it, can be traced most directly to the work of Danish antiquarians during the early part of the nineteenth century, and even more specifically to the work of Christian Jurgensen Thomsen (1788-1865), an early student of runic monuments and the first official curator of the Danish National Museum in Copenhagen.¹³³ Thomsen had originally become involved in archaeological activities as a member of the Danish Royal Commission on National Antiquities, a governmentally appointed board charged with looking into ways of preserving field remains in Denmark. Succeeding Professor Rasmus Nyerup (1759-1829) as Secretary of the Commission in 1816, Thomsen was soon afterward appointed to his post at the newly-organized Royal Museum of Northern Antiquities (the Kongelige Museum for Nordiske Oldsager). Sensing the great potential of museums of that kind for the study of Danish history, Thomsen directed most of his efforts to obtaining new materials and to publicizing the museum's importance. He paid particular attention to peasants and farmers, the most likely donors and, in a manner which suggests Fox's own later approach, took special care to explain the principles of the collection to his audience, emphasizing at the same time their own place within the historical framework which it conveyed.¹³⁴

The most important feature of the Danish National Museum was its arrangement, and it was that aspect which in turn was to have the greatest impact on archaeologists of the mid-nineteenth century, including Fox. The main principle was, that rather than grouping objects together according to their various sites of origin, Thomsen arranged the whole collection on the basis of materials, namely stone, bronze (or 'brass' as Thomsen termed

¹³¹ James Heywood, 'Presidential Address', *JBA*, 6 (1850), 333. Also see F. D. Klingender, *Art and the Industrial Revolution* (1968; rpt. New York: Schocken Books, 1970), pp. 66-67.

¹³² John M. Kemble, 'Introduction', *AJ* 6 (1849), 2.

¹³³ Thomsen's contribution has been discussed numerous times. For summaries, see: Conrad Engelhardt, *Denmark in the Early Iron Age* (London: Williams and Norgate, 1866), 1-2; Birket-Smith, 'The History of Ethnology in Denmark', *JRAI*, 82 (1952), 120-28; Daniel, *A Hundred and Fifty Years*, pp. 38-47; *Origins and Growth*, pp. 91-95; Hole and Heizer, pp. 16-18; Thomas Thomsen, 'The Study of Man', *American-Scandinavian Review*, 25, 4 (1937), 309-18; Frese, pp. 42-43. For more detailed discussion of Thomsen's life see Victor Hermansen, 'C.J. Thomsen and the Founding of the Ethnographical Museum', *National Museets Shifter, Ethnografisk Raekke I*, p. 27, 1941. Moritz Hoernes, 'Geschichte und Kritik des systems der drei prähistorischen Culturperioden', *Mittheilungen der Anthropologischen Gesellschaft in Wien*, 23 (1893), 71-78; Saloman Reinarch, Rev. of Hoernes' *Histoire et critique du systeme des trois ages prehistoriques*, *L'Anthropology*, 4 (1893), 476-90.

¹³⁴ Daniel, *Origins and Growth*, p. 92.

it) and iron and, secondarily, according to their apparent function or use, much as did Fox at a later date. The origins of Thomsen's system, soon known, of course, as the Three Age System, are not entirely clear. The general concept might be traced, for example, back as far as the writings of Lucretius; a sequence of stone, bronze and iron was hypothesized as well by Chinese historians as early as 52 A.D. Thomsen's own scheme, however, probably depended more specifically on the work of his immediate predecessors, P. F. Syhm, Skuli Thorlacius and, most importantly, L.S. Vedel-Simonsen, all of whom had drawn attention to the same transition in their own histories of the area.¹³⁵ It is interesting to note, too, that the Danish Royal collection, first established in the seventeenth century by Frederik IV (and the successor of Christian V) had also been organized according to material and use following the plan of Frederik's friend and fellow collector, Olo Worm (1588-1654), whose own multifarious cabinet of curiosities was absorbed into the Royal collections.¹³⁶ Whether that precedent had any impact on Thomsen's own scheme is less clear.

Thomsen first introduced his scheme in 1818 when the 'new arrangement' was mentioned in a Commissioner's report. It was first discussed at length in a letter to his friend Professor Keyser in 1824.¹³⁷ Publication would wait until 1836 and the appearance of Thomsen's hugely influential Ledestraad til Nordisk Oldkyndighed (translated into English as A Guide to Northern Antiquities by Lord Ellesmere in 1848). As Thomsen explained, anticipating Fox's own later remarks:

Although the attempts herewith made to classify according to age have not been without success, still the complete development of such a mode of classification would much exceed our limits, so that we found it...on the whole more convenient to arrange them according to materials of which they were composed.¹³⁸

¹³⁵ 'The Three Ages: an Essay in Archaeological Method', English Historical Rev. 61 (1946), 418-19. Cf. Lowie, p. 13. J.N.L. Meyers states the argument of classical origins most emphatically. For a general discussion, see Daniel, Three Ages, p. 12. P.F. Syhm discussed the three ages in his History of Denmark, Norway and Holstein (1776); Skuli Thorlacius in his Concerning Thor and his Hammer (1802); L.S. Vedel Simonsen in his Udsigt over National-historians aelaste og Maerkeligst Perioder (1813-16). Of a slightly later date is (Magnus) Bruzelius, Emeriges and Historia fur Ungdom Lund (Berlin: Truät, 1830). Ingwald Undset specifically credits Nyerup for Thomsen's idea: M. Ingwald Undset 'Le Prehistorique Scandinave, ses origines et son developpement', Review d'Anthropologie, NS 2 (1887), 313-22. See Daniel, Origins and Growth, p. 90. An early synopsis of the Three Age Idea is found in A. Henry Rhind's 'On the History of the Systematic Classification of Primeval Relics', AJ 13 (1856), 209-14.

¹³⁶ Museum Wormianum seu. Historia Revum Rariorum... (Copenhagen: Lugduni Batavarum Apud Iohanneum Elsevirum, 1655); William Oliver, 'A Letter to the Publisher, giving his Remarks in a late Journey into Denmark and Holland', Philosophical Transactions, No. 285 (1703), 1400-10. Also see Murray, I, 103-4; Wittlin, pp. 85-86; Kaj Birket-Smith 'Ethnology in Denmark', pp. 115-16; Margaret T. Hodgen, Early Anthropology in the 16th and 17th Centuries (Phila.: Univ. of Penn. Press, 1964).

¹³⁷ Daniel, Origins and Growth, pp. 92-3; Three Ages, p. 6.

¹³⁸ Lord Ellesmere, A Guide to Northern Archaeology (London: James Rain, 1848), p. 42-46.

In all there were at least ten distinct categories or subjects in addition to the more basic material divisions. Each category was then further subdivided according to a variety of criteria. Pottery, for example, was divided into (a) vessels to be hung up, (b) vessels designed to be carried, (c) flower-pot shaped vessels, (d) bowl-shaped vessels, (e) cup-shaped vessels, (f) beaker-shaped vessels, (g) can-shaped vessels, (h) pitcher-shaped vessels, (i) bottle-shaped vessels, (k) oval- and oblong-shaped clay urns, and (l) closed urns.¹³⁹ Other objects and materials followed a similarly comprehensive pattern. Organized throughout twenty rooms of the Christiansborg Palace, the collection was unrivaled in size and complexity. Thomsen's assistant and eventual successor, J.J.A. Worsaae (1821-1885), estimated in 1847 that there were over 3,000 stone tools alone; in 1858 when Fox's colleague J. O. Westwood visited the museum, he placed a figure for the total of over 20,000.¹⁴⁰ While obviously small by modern standards, in contemporary times the collection was considered virtually unprecedented.

What struck Westwood and other archaeologists of Fox's time was not simply the size or comprehensiveness of the Danish collection, but its greater implications for the study of archaeological remains. Although his system was primarily a museum classification technique, as many historians have noted, Thomsen was aware from the first of its potential as a key to the forgotten past.¹⁴¹ While his predecessor Nyerup had despaired that 'everything which has come down to us from heathendom is wrapped in a thick fog; it belongs to a span of time which we cannot measure'¹⁴², Thomsen was certain that his organizational technique would provide a framework through which other details of Danish history might be reconstructed. Most changes were seen as abrupt ones. The Bronze Age, for example, was seen as a sudden break from the Stone Age, perhaps as a result of an invasion by an alien people and not as a gradual process of change and improvement as is often now assumed.¹⁴³ But overall the Three Age System suggested a natural sequence and therefore conveyed many of the same notions of progress and development which later characterized collections such as Fox's. Each material represented, therefore, not merely a point in history but a discernible and inevitable step in man's progress. It was such an understanding, as Fox himself later stressed, which

¹³⁹ Ellesmere, p. 43 Cited in Daniel, *A Hundred and Fifty Years*, p. 46. Also see J.J.A. Worsaae, *De L'Organisation des Musées Historico-Archéologiques* (Copenhagen: Thiele, 1885).

¹⁴⁰ J.J.A. Worsaae, 'An Account of the Formation of the Museum at Copenhagen', *PRIA*, 3 (1846), 314; J. O. Westwood, 'Notes of Tour in Denmark, Prussia and Holland', *AJ*, 16 (1858), 140. For earlier discussions of the Danish National Museum by British Antiquaries, see Proceedings of the Central Committee, 10 Sep 1845, *JBAA* 1 (1845), 319; and James Yates, 'Notes on Axe Heads and Wedges discovered in Java', *AJ* 11 (1854), 116-23.

¹⁴¹ Murray, II, 241; Joseph Dechelette, *Manual d'archeologia prehistoire* (Paris: n.p. 1908), pp. 11-12; Oliver Cummings Farrington 'The Rise of Natural History Museums', *Science*, NS 42 (1915), 208; Hoernes, p. 72; Lowie, p. 21; Hermansen, p. 27; Daniel, *Three Ages*, p. 12.

¹⁴² Rasmus Nyerup, *Oversyn over Foedernelandets Mindesmaerker fra Oldtiden*. Cited in R.A.S. Macalister, *Textbook of European Archaeology* (Cambridge: The Univ. Press, 1921), I 9; Evans, *Antiquaries*, p. 230; Daniel, *Three Ages*, p. 7.

¹⁴³ See Worsaae, *Primeval Antiquities*, p. 24. For a general discussion, see Goldenweiser, *Anthropology*, pp. 513-14; and Daniel, *A Hundred and Fifty Years*, p. 45.

finally placed archaeology among the true sciences.¹⁴⁴

The Three Age System was to have a tremendous impact on European archaeology and ultimately, therefore, on Fox's own work and collection. The later British archaeologist R.A.S. Macalister called it 'the cornerstone of modern archaeology'; his French contemporary Joseph Déchelette referred to it as 'the basis of prehistory'.¹⁴⁵ Its effect on other national collections was almost immediate. G.C. Frederich Lisch, curator of the Grand Duke of Mecklenburg-Schwerin's Museum at Ludwigslust Castle, had introduced a comparable system as early as 1836, or the same year Thomsen's guide appeared. The Frenchman Danneil at Salzwedel followed him shortly afterward, claiming, as had Lisch, that he arrived at his own system independently.¹⁴⁶ More directly influenced was Sven Nilsson (1787-1883), professor of Zoology at Lund, and the Swiss antiquarian A. Morlot, Professor of Geology at the Academy in Lausanne, both of whom admitted to Thomsen's influence.¹⁴⁷ But more important than its adoption as a museum organization technique was the fact of the Three Age System's acceptance as a true representation of the sequence of human history. Largely through the efforts of Thomsen's students Worsaae and Sorteryp Strunk Herbst, its validity was consistently demonstrated through excavations and verified by the stratigraphic record.¹⁴⁸ No longer a hypothetical system based on a generalized or abstract notion of human progress and development, the Three Age System could be shown to have a basis in fact. And, of course, it was 'facts' which mattered most to archaeologists of the 1860s, particularly someone like Fox.

The success of the Danish example had been apparent to most British archaeologists for several years by the time of Fox's first involvement in the field, and the establishment of a comparable national museum had for many years been a topic of wide concern. Together with the question of man's antiquity, it remained, in fact, one of the overriding issues of the day. From the first, attention had tended to settle on the British Museum. Early British antiquities, supplemented through the years by Roman or Romano-British and Medieval ones, had been a part of the National Museum since the beginning. Sir Hans Sloan's nuclear collection, for example, included flint implements discovered in London along with a number of objects from the time of the Roman occupation.¹⁴⁹ While

¹⁴⁴ Fox, *Primitive Warfare I*, p. 612. 'Primitive Warfare I', p. 612.

¹⁴⁵ Macalister, I, 11; Dechelette, I, 11.

¹⁴⁶ Frederick Lisch published his own system in the Catalogue *Frederico-Francisceum* for the year 1837. Daniel, *Three Ages*, p. 12.

¹⁴⁷ Sven Nilsson, *Skandinaviska Nordens Drinuarare* (1838-1843); translated by John Lubbock as *The Primitive Inhabitants of Scandinavia* 3rd ed., (London: Longman, Green, 1868). A. Morlot, *Lecon d'ouverture d'un cours sur la haute antiquite fait a l'Academe de Lausanne* (Lausanne: n.p., 1860); and 'Etudes geologico-archeologiques en Danemark', *Bulletin de la Société vaudois des Sciences Naturelles* 46 (1860), Published as *General Views on Archaeology* (Washington, D.C.: Smithsonian Institution, 1861).

¹⁴⁸ Daniel, *A Hundred and Fifty Years*, p. 42.

¹⁴⁹ A.B. Tonnochy, 'Department of British and Medieval Antiquities', *BMQ*, 18 (1953), 16-17; Christopher Hawkes, 'The British Museum and British Archaeology', *Antiquity*, 36 (1962), 248-51; Charles Hercules Read, 'Museums in the Present and Future', *The Antiquaries Journal*, 1 (1921), 167-82. Alexander Marshack, 'Upper Palaeolithic Engraved Pieces in the British Museum', *BMQ*, 35 (1971), 137-38. For more general discussion, see Edwards E. Edwards,

of obvious interest to the public and antiquarians, as publications such as Rymsdyk's *Museum Britannicum* suggest¹⁵⁰, British antiquities had been generally neglected by the museum authorities over the years. William Pettigrew drew attention to the fact in 1845: 'The British Museum contains only particular specimens and not a series minutely illustrative of the antiquities of various nations and times, ...'. C. Roach Smith, pointing to the efforts of 'Counsellor Thompson (sic)', noted further the advantages that 'a great service the collection at Copenhagen afforded to the antiquary by the care and systematic arrangement with which the numerous ancient remains of Denmark had been rendered useful and accessible'.¹⁵¹ Gideon Algernon Mantell, in his review of Thoms' translation of Worsaae's *The Primeval Antiquities of Denmark* complained that 'no adequate public collection exists', stressing at the same time Denmark's superior accomplishments.¹⁵² But it was Worsaae's own visits to Great Britain, first to Dublin in 1847-48, and then to London in 1852, which helped to firmly put the matter before the British antiquarian community and, in turn, finally led to acceptance of the programme within Britain. From that point on, the establishment of a reputable scientific collection had become more or less a universal concern.

Much of the impetus for the new attention focused on the national collection came from the museum staff itself. Henry Ellis, then Keeper of the heterogeneous Department of Antiquities, and his assistant Samuel Birch (1813-1885), were in communication with Worsaae regarding points of detail, such as techniques of labelling and cataloguing and methods of arrangement, from the 1840 on—to improve the scientific stature of the collections and other efforts had been made periodically.¹⁵³ But it was only in 1851, with the appointment of Fox's friend A.W. Franks as Assistant Keeper in charge of British Medieval Antiquities, that a more systematic treatment of the museum's collections became a reality. While a number of important collections, such as that of C. Roach Smith, were lost, due in part to the parsimonious attitude of the Museum Trustees, the overall collection continued to grow under Franks' guidance at a steady pace¹⁵⁴; Fox's

Lives of the Founders of the British Museum (London: Intories, 1870), I; Henry C. Shelley, The British Museum: Its Histories and Treasures (Boston: L.C. Page, 1911), 272-80. Kendrick and Miller.

¹⁵⁰ John and Andrew Rymsdek, *Museum Britannicum*, ed by P. Boyle (London: For the Editor, 1791); pp. 11, 39, 40. Rymsdek's was one of the first popular guides to the Museum's holdings.

¹⁵¹ William Pettigrew, 'Address, Winchester Meeting of the British Archaeological Association'; Also cited Kendrick, p. 133. Also see Proc. of the Central Committee, *JBAA*, 1 (1845), 319.

¹⁵² [Gideon Algernon Montell], Rev. of J.A.A. Worsaae, *The Primeval Antiquities of Denmark*, trans W.H. Thomas, *AJ*, 7 (1849), 102. Also see Mantell, 'On Remains of Men, and Works of Art', p. 347.

¹⁵³ General Discussion, *PSAL*, 1 (1846), 149.

¹⁵⁴ The collection was offered for the relatively low price of £2,000. The loss of the Smith collection did much to call attention to the general neglect of the national collections. See Richard C. Neville, Discussion, Proc. AI, 13 Apr 1855, *AJ*, 12 (1855), 200; Murray I, 235; and Kendrick p. 137. The refusal of the Faussett collection was to cause a similar controversy. J.O. Westwood, 'Remarks on the value of the Faussett Collection', *AJ*, 11 (1853), 52 and John Evans, 'Comments on Faussett Proposal', *AJ*, 22, (1864-5), 89; Kendrick, 136-7. For other contributions and purchases, see Franks' summaries in *AJ* and *PSAL*. The original Faussett collection was loaned by Mr. Mayer to the Rochester Meeting, *AJ*, 20 (1862), 383; see The Faussett Collection of

own contributions of the Ogham stones in 1865 were only one of many contributions of that kind. Possessing only four cases at the time of Franks' appointment, by 1859, the department could claim nearly one hundred separate cabinets. The total number of pieces was estimated at slightly over 3,000. By the early sixties, or the period when Fox must have been most familiar with the collection, the number had increased by half again. Between 1862 and 1866, when the British Medieval Antiquities together with Oriental Antiquities and Ethnography were formed into a separate department under Franks, the number doubled.¹⁵⁵

The British Museum's collection, was, however, not the only one to have expanded by the time of Fox's involvement; and indeed its growth was only a reflection of a more general change among British collections. Through the efforts of the Society of Antiquaries of Scotland and the Royal Irish Academy, comparable collections had been formed in Dublin and Edinburgh respectively. The first was officially designated as a 'national collection' in 1853, the second in 1854.¹⁵⁶ Most local and national societies had also formed their own collections. The Society of Antiquaries, for example, while accepting the British Museum to be the main focus of their efforts, had decided as well to form their own collection, and in 1846 had made first provisions for it. Shortly before Fox was elected, it had been ambitiously rearranged in new mahogany cabinets in the vestibule at Somerset House, where fellows and their guests could easily view it.¹⁵⁷ Newer organizations, such as the Archaeological Institute and the British Archaeological Association, made similar efforts, each appointing curators to watch over their displays.

Anglo-Saxon Antiquities (London: Privately Printed, 1854); Bryan Faussett, Inventorium Sepulchrale (London: For The Subscribers, 1856).

¹⁵⁵ British Museum, Synopsis of the Contents of the British Museum (London: For The Trustees, published annually from 1808). Also, A Guide to the Exhibition Rooms of the Department of National History and Antiquities (London: For The Trustees of the British Museum, 1859 and 1866). No British antiquities are recorded in the 1851 Synopsis. For the yearly growth of the collection see: Franks, 'The Collection of British Antiquities in the British Museum'; 'On the Additions to the Collection of National Antiquities in the British Museum'; 'Account of Additions made to collections of British Antiquities at the British Museum during the year 1864'; Miller pp. 211-13; Kendrick , pp. 137-41.

¹⁵⁶ The growth of each is disclosed in the Archaeological Intelligence or Miscellaneous News of the Institute. See AJ, 6 (1849), 209; AJ, 7 (1850), 110. For example, Samuel A. Ossory Fitzpatrick, Dublin: A Historical and Topographical Account of the City (London: Methuen, 1907), p. 162; E.C.R. Armstrong, Guide to the Collection of Irish Antiquities (Dublin: RIA, 1920); National Museum of Scotland, A Short Guide to the National Museum of Antiquities of Scotland (Edinburgh: HMSO, 1935), pp. 3-5. For the beginnings of the Scottish collections see Alexander Kincaid, The History of Edinburgh, From the Earliest Accounts to the Present Time (Edinburgh: Printed Privately 1787) pp. 117-19.

¹⁵⁷ Catalogue of Antiquities, Coins, Pictures and Miscellaneous Curiosities in the Possession of the Society of Antiquaries of London, comp. by Albert Way (London: John Bowyer Nichols and Son by Order of the Council, 1847). Also see J. H. Markham, Letter to the Rt. Hon. Earl of Aberdeen, Gentleman's Magazine, 98, Pt. 1 (1828), 61-64, on the collection's beginnings. The new arrangements are described by Lord Stanhope, 'Presidential Address', PSAL, 2dS 2 (1863) 257; and Evans, Antiquaries, pp. 250-57. A plan is found in J. Britton and A. Pugin, Illustrations of the Public Buildings of London (London: J. Taylor, 1825-28), II, 16-31.

Finally, the archaeological congresses, held each year by both the Institute and Archaeological Association, established temporary museums as a matter of course, often leaving them as the foundation of regional collections. In 1864, Thomas Wright in his review of the progress of archaeology over the previous ten years commented: 'Now there is hardly a town of any importance in the kingdom which does not possess its ... local museum'.¹⁵⁸ Archaeology had truly entered into its museum age, as Fox and his new colleagues, particularly fellow collectors such as Evans or Franks, were, no doubt, fully aware.

8. The Three Age System in Britain

Surprisingly, while the Danish example might be said to have helped promote an upsurge in interest, the Three Age System itself had made far less impact among museums by the early 1860s, as Fox and others among the more progressive faction realized. As on the Continent, there had been speculation over the apparent sequence of materials for a considerable period. Bishop Lyttleton as early as 1765, pointed out: 'There is not the least doubt of these stone instruments having been fabricated in the early times, and by barbarous peoples before the use of iron and other metals was known'. A Rev. Mr. Lort, in his 'Observations on Celts' ten years later, pointed out that iron celts had been preceded by bronze and copper ones; copper ones by stone tools.¹⁵⁹ Early field workers, in turn, had confirmed the hypothesis. James Douglas (1753-1795), hinted at it in his Nenia Britannica (1792). Richard Colt Hoare (1758-1838), Fox's figurative forbear in Wiltshire, stressed the same sequence in his Ancient Wiltshire (1812).¹⁶⁰ The first systematic interest, however, came only with the publication of Lord Ellesmere's translation of Thomsen's guide in 1848, and with the publication of Worsaae's Irish lectures at the Royal Irish Academy shortly afterward.¹⁶¹ As a result a number of antiquarians were

¹⁵⁸ Thomas Wright, 'On the Progress and Present Condition of Archaeological Science', JBAA, 22 (1866), 68-69. A local museum in fact followed in the wake of nearly every congress. See W. Jerdan, 'Suggestions for the Extension of the British Archaeological Association', AJ, 1 (1844), 297-8; 'Catalogue of Antiquaries Exhibited during the Annual Meeting at Winchester', in Proc. of the Annual Meeting of the Arch. Inst. of Gt. Brit. and Ireland (London: Longman, Brown, Green and Longmans, 1846); 'Catalogue of Antiquities Exhibited in the Museum formed.... at St. Peter's School ... during the Annual Meeting at York', in Memoirs Illustrative of the History and Antiquities of the County and City of York (London: Longman, Brown, Green and Longmans, 1848), etc. Similar collections were established at Norwich (1847), Oxford (1850) and Bristol (1851). Also see Kendrick, p. 133; Forde-Johnston, p. 40.

¹⁵⁹ Bishop Lyttleton, 'Observations on Stone Hatchets', Archaeologia, 2 (1766), 118-23; Rev. Mr. Lort, 'Observations on Celts', Archaeologia, 5 (1776), 106-18

¹⁶⁰ The Ancient History of Wiltshire (London: William Miller, 1812), I, p. 76; Douglas made the same observations in his Two Dissertations on the Brass Instruments Called Celts (London: J. Nichols, 1785), p. 12. Also see: James Douglas, Nenia Britannica (London: J. Nichols, 1793), pp. 150, 150n; Richard Colt Hoare; William Cunnington, 'Account of Tumuli opened in Wiltshire', Archaeologia, 15 (1803), 122-29; and Boulase, Observations on the Antiquities of Cornwall (Oxford: W. Jackson, 1754), p. 289.

¹⁶¹ For example, see J.J.A. Worsaae, 'Review of the different descriptions of Danish and Irish Antiquities', PRIA, 3 (1846), 327-44. Worsaae was also in communication with the Society of Antiquaries and spoke at the Archaeological Institute on several occasions during his visit. See

convinced. Mantell declared, as early as 1850, that by reference to the Danish system 'the early history of a country may be read, and the process of advancing civilisation traced,...' ¹⁶² Others, however, remained skeptical. J. M. Kemble, while a staunch supporter of a more scientific treatment of archaeological collections, argued that the Danish model did not apply to Ireland, his own special province. ¹⁶³ Thomas Wright disagreed with the geological analogy which he saw as implicit in the Three Age System. His main concern was whether archaeology was to be considered a branch of history, as he felt it should be, or, alternatively, a natural science. 'There is something we may perhaps say poetical, certainly imaginative, in talking of an age of stone, or an age of bronze, or an age of iron,' he explained in 1852, 'but such divisions have no meaning in history ...' In 1866 he was still certain that the Three Age System or 'period theory,' as it was often known, was 'based upon very unfound foundations', a point he continued to make repeatedly over the next ten years. ¹⁶⁴

While opposed by Wright and other leading members of the antiquarian community, the Three Age System had by Fox's time gathered a considerable number of adherents even among the more conventional archaeologists. The Scottish prehistorian Daniel Wilson (1816-1892), accepted the principle as early as 1851 in his Archaeology and the Prehistoric Annals of Scotland. J.O. Westwood was obviously impressed, at least after his visit to Copenhagen in 1857. Albert Way had apparently accepted the notion of Three Ages at an even earlier date, writing of it as early as 1846 ¹⁶⁵. For most scholars, however, acceptance awaited Lubbock's articles of 1862; popular acceptance came with the publication of Prehistoric Times three years later. But even then acceptance took a hesitant character, and for many the issue was never fully resolved. Most archaeologists of Fox's generation, in fact, compromised, accepting, as had Nilsson, that while regional variations and momentary lapses or setbacks had to be taken into account, 'civilisation

Report on communication with Henry Ellis, PSAL, 1 (1846), 149; J.J.A. Worsaae, 'A Few Remarks upon the Antiquities of Silver found at Coerdale', AJ, 4 (1847), 200-03. Later contributions included 'The Antiquities of South Jutland or Sleswick', AJ, 23 (1865), 21-40, 96-121, 181-89. For a discussion of his impact see Judith Wilkins, 'Worsaae and British Antiquities', Antiquity, 35 (1961), 214-20.

¹⁶² [Mantell], Review of Worsaae, p. 101. Another early convert was J.Y. Akerman, 'On Some of the Weapons of the Celt and Teutonic Races', Archaeologia, 34 (1851), 171-89.

¹⁶³ John Mitchell Kemble, 'The Utility of Antiquarian Collections as Throwing Light on the Prehistoric Annals of European Nations', Royal Irish Acad. Feb 1857; also, Horace Ferales; or, Studies in the Archaeology of the Northern Nations (London: Reeve, 1863), pp. 60-61.

¹⁶⁴ [Thomas Wright] Rev. of James Eccleston's An Introduction to English Antiquities, London, 1847 in the Edinburgh Review, 86 (1847), 307-28; Celt, Roman and Saxon (London: Printed Privately, 1856); and JBAA, 22 (1866), 72. For his continued opposition, see last edition of Thomas Wright's Celt, Roman and Saxon (London: Printed Privately, 1875), p.vii. Another consistent opponent was James Fergusson who argued against the concept of a 'Bronze Age' as late as 1872; see Rude Stone Implements. The longstanding opposition among many antiquarians is discussed at length by Evans, Antiquaries, p. 281-83; also Grahame Clark, 'The Invasion Hypothesis in British Archaeology', Antiquity, 40 (1966), 172-89; Wilkins, pp. 217-19.

¹⁶⁵ Daniel Wilson, The Archaeology and Prehistoric Annals of Scotland (Edinburgh: Sutherland and Knox, 1851), p. 21; J.O. Westwood, 'Archaeological Notes', p. 139; Albert Way, 'Introductory Address', AJ (1844), 1.

and humanity are steadily progressing¹⁶⁶, as Fox put it. History and science had effected only a temporary truce.

Despite the growing acknowledgment among British archaeologists of what was commonly referred to as 'the Danish System', the Three Age System was surprisingly slow to have an effect upon the arrangement of museums and private collections in Britain. There were, as a result, few collections which might be considered to have offered a model to Fox in that regard. Thomas Bateman's collection, known to Fox because of its extensive arms collection, as we have seen, was perhaps typical. In all, it consisted of five major divisions: (1) Britanic, (2) Ethnological, (3) Relics, (4) Arms and armour, (5) Collections illustrative of art and manufacturing. The first of those, or that division to which the Three Age System would have been the most applicable, was subdivided into Celtic, Roman, Romano-British, Teutonic (Anglo-Saxon), Medieval and Old English¹⁶⁷. The many temporary museums established by the Archaeological Association or Institute generally conformed to that pattern grouping materials under such general categories as Primeval, Romano-British, and Medieval, as did the indices of the several journals. As late as 1856 in Edinburgh, it was decided because of the 'imperfect state of archaeological classification', that the collection would be organized in a conventional way, including (1) Antiquities of Egypt, Greece, Rome, not connected with Britain, (2) Antiquities of the early period found in North Britain exclusive of Roman and Medieval, (3) the like found in England or the like found in Ireland, (4) Roman and Romano-British and (6) Medieval Antiquities.¹⁶⁸

Only the British Museum took a stronger stand and even it applied the Danish system with caution during its reorganization of prehistoric materials of the late 1850s. As the Synopsis published in 1859 explained: 'They have, for convenience, been classified according to their materials, and in the order corresponding to that of the supposed introduction of such materials within this country'¹⁶⁹. That of 1866, despite Franks' intervention, was no more affirmative. It was certainly a long way from the general acceptance of the latter part of the century, or the period after 1875 when Fox's collection first became widely known. But nonetheless, the first steps had been taken.

¹⁶⁶ Cf. Fox, 'Primitive Warfare II', p. 402. On Nilsson's revisionist view see his Primitive Inhabitants of Scandinavia. Also Daniel, A Hundred and Fifty Years, 42-45; and Origins and Growth, 106-09.

¹⁶⁷ Descriptive Catalogue of the Antiquities and Miscellaneous Objects preserved in the Museum of Thomas Bateman at Lomberdale House, Derbyshire (Bakewell: Printed Privately, 1855). The collection is also described in Miscellaneous Notes, JBAA, 7 (1851), 325-27; 'Mr. Bateman's Museum of Antiquities', JBAA, 12 (1856), 201-02; 'Bateman's Museum', Athenaeum, No. 1767 (Sep 1861), 321-22. Also see: Thomas Bateman, Vestiges of the Antiquities of Derbyshire (London: John Russell, 1857) and Ten Years' Digging in Celtic and Saxon Grave Hills (London: J.R. Smith, 1861). Bateman's collection is referred to by Fox in his 'On the Opening of Two Cairns near Bangor, North Wales', JESL, 2 (1870), 319. His classification of urns was described as 'very insufficient'.

¹⁶⁸ Catalogue of Antiquities, Works of Art and Historical Scottish Relics, exhibited in the Museum of the Archaeological Institute of Great Britain and Ireland, During their Annual Meeting, held in Edinburgh, July 1856 (Edinburgh: Thomas Constable, 1859).

¹⁶⁹ British Museum, A Guide to Antiquities, 1859, p. 98.

By all indications, Fox embraced the Three Age System at a relatively early date. Objects listed in his collection such as the 'Iron' Umbo shield or 'bronze' celts or the 'bronze spear point' hint at acceptance at least by the early 1860s¹⁷⁰. Unfortunately, most of his later prehistoric series were never catalogued at all, still intended, as of 1874, to form a third and final part of his handbook. His three lectures on 'Primitive Warfare' of 1867-69, however, refer to the Three Ages as a matter of course, and by 1874 prehistoric materials were organized into such general categories as 'Palaeolithic', 'Neolithic', 'Bronze' and 'Iron', the first two categories obviously having been formed in accordance with Lubbock's own terminology¹⁷¹. Fox's association with Way suggests, moreover, that he was familiar with the Three Age System from the time of his first interest in archaeology, possibly as early as the 1850s. Also, Worsaae and Thomsen are referred to frequently in his writings, and he later corresponded with Worsaae regarding the Danish collection, visiting it himself in 1879¹⁷². In later writings he held up the Danish collection as the indisputable model for a national collection, arguing, together with Franks and Evans, that Britain, too, needed a collection of comparable depth and ambition¹⁷³. There is little doubt that he saw his own collection as a contribution to that effort and, in part, as a response to the Danish challenge.

While the Danish National Museum was perhaps the preeminent example for Fox, that of the Royal Irish Academy in Dublin was probably a more direct and, in many ways, more immediate model. Begun during the early part of the nineteenth century, the Irish Academy collections had been radically reorganized in 1851, under the initial direction of George Petrie (1789-1866). The Dublin Industrial Exhibition of 1853 had provided the opportunity for experiment, and Lord Talbot de Malahide, sensing the opportunity 'to illustrate the national connection between the ancient inhabitants of Great Britain and those of Ireland', had instituted a comprehensive scheme for the collection based on the Three Age System¹⁷⁴. His scheme was continued after the exhibition when the whole collection was reinstalled in the Academy's rooms near Merrion Square. Petrie, unable to complete the catalogue, was succeeded by William Robert Wills Wilde (1815-1876), a

¹⁷⁰ Fox, *Catalogue*, pp. 15 and 116.

¹⁷¹ Fox, 'Primitive Warfare I', p. 617; 'Primitive Warfare II', p. 403. For later application: 'Principles of Classification'; *Catalogue*, v-vii.

¹⁷² Fox, 'Primitive Warfare III', p. 521, for his first references. For his visit, SSW, PRP, P 116; 'Excavations at Caesar's Camp, near Lewes', *Archaeologia*, 46 (1881), 460. His first letter to Worsaae is dated 22 Sep 1868. I am indebted to Marianne Poulsen of the National-museet for copies of their correspondence.

¹⁷³ See Fox, 'Address to the Department of Anthropology of the British Association, Brighton', *RBAAS* (1872), 157-74, and 'Principles of Classification', p. 295, in particular.

¹⁷⁴ Talbot de Malahide, 'Proposed Exhibition of Works of Middle Age Art in the Great Industrial Exhibition at Dublin 1853' *AJ*, 9 (1852), 398. Other material on the Royal Irish Academy Museum and its early history is found in Fitzpatrick, pp. 162 and 334; Armstrong, pp. 1-3; Miscellaneous Notes, *AJ*, 6 (1849), 209; Notes, *AJ*, 7 (1850); Talbot de Malahide, 'Presidential Address', *AJ*, 10 (1853), 77-78. For progress of the collection, see *PRIA*, 2 (1844), 583-93; *PRIA*, 3 (1846), 327-44; *PRIA*, 5 (1854), 116-17. More recently, see Penniman, p. 56; Daniel, *A Hundred and Fifty Years*; and Michael Herity, 'Early finds of Irish Antiquities from the Minute-Books of the Society of Antiquaries of London', *The Antiquaries Journal*, 49 (1969), 1-21.

well-known Dublin physician (and father, it might be noted, of Oscar Wilde), who in 1857, provided the first part of the Academy's ambitious new catalogue, Stone, Earth and Vegetable Materials; the second and third parts Animal Materials and Bronze, and Gold appeared in 1861 and 1862, respectively, or just prior to Fox's posting in Ireland¹⁷⁵.

Again, Wilde's overall scheme clearly paralleled that employed by Fox. Recognizing that 'all attempts at an arrangement of Objects and Antique Art, must, to a certain extent, be arbitrary and artificial'; and that 'in the present state of antiquarian knowledge, a chronological classification could not be fully carried out', Wilde adopted a primary arrangement according to 'Material' and a secondary division, according to 'Use'. As the catalogue title suggests, the Three Age System, while explicitly eschewed, remained implicitly in the background. A more immediate reference, however, was the biological model. As Wilde explained 'the classification and arrangement usually employed in Natural History according to Class, Order, Species, and Variety, has, for the sake of convenience, been adopted'. Such a system, together with allowances for special exhibits such as the materials excavated by Wilde from the Irish crannoges, 'is capable of including every object to be found in the collection of the Academy', Wilde explained¹⁷⁶.

In terms of arrangement, the Academy's museum came even closer to that later set out by Fox. The display began on the stairway with stone implements, proceeding to the gallery where stone, earth, vegetable and animal materials, together with skeletons and other human remains, were arranged. Coins and metals were in cases along the railing, extending over the court below. Bronze, iron, silver and gold ornaments were placed in the courtyard along with ecclesiastical antiquities and a special Scandinavian collection. Throughout, larger objects were attached to walls; smaller ones, arranged in trays. Each was labelled and numbered, 'the numbers extending throughout the different series'¹⁷⁷. Drawings and casts supplemented original objects whenever possible or, when it was considered necessary for the completion of a 'series', were again designated as such in his catalogue.

As with Fox's collection, the term 'species' in Wilde's arrangement referred primarily to function or 'use'. In all there were twelve separate divisions: (1) Weapons, (2) Tools and

¹⁷⁵ A Descriptive Catalogue of the Museum of Antiquities of the Royal Irish Academy, Parts I - III (Dublin: For the Royal Irish Academy, 1857-1862). The first is subtitled Stone, Earth and Vegetable Materials (1857); the second, Animal Materials and Bronze (1861); and the third, Gold (1863). Information on Wilde based on DNB entry; Obituary Notice, The Dublin University Magazine, 85 (May 1875), 570-89; and Martin Fido, Oscar Wilde, (1873; rpt. London: Cardinal, 1976), pp. 16-22. Among Wilde's other contributions were 'Pharos of Corunna', PRIA, 2 (1844), 583-93; 'Memoir of the Dublin Philosophical Society of 1683', PRIA, 3 (1846), 160-76; 'On a Cinerary Urn found near Bagnalstown', PRIA, 4 (1847), 35-36; and 'On the Introduction and Period of the General Use of the Potato in Ireland', PRIA, 6 (1856), 356-72. Later he tended to concentrate on the Academy's collection: 'Remarks on Donations', PRIA, 7 (1861), 159-62; 'On the Unmanufactured Animal Remains belonging to the Academy', PRIA, 7 (1861), 181-211; 'On the Gold Antiquities recently added to the Museum', PRIA, 7 (1864), 406-09; etc.

¹⁷⁶ Wilde, Catalogue, p. 1.

¹⁷⁷ Ibid, p. 4.

Weapon-Tools, (3) Food Implements, (4) Household Economy, (5) Dress and Personal Decoration, (6) Amusements, (7) Music, (8) Money, (9) Medicine, (10) Religion, (11) Sepulchral, (12) Miscellaneous. 'Varieties', again as in Fox's series, were based usually on what might be considered formal properties—'serving the same purpose but differing in shape, design, ornamentation or mode of application'. Weapons, for example, were divided into: offensive and defensive forms; weapons used in war and those used in 'the Chase, Fishing, &c.'; arrow, spear and javelin heads; sling-stones; war clubs, battle-axes, axe-hammers; skeins, daggers, swords, pikes; shields, armour, helmets; firearms, shot, and so on. Tools and weapon-tools included flint-flakes, knives, scrapers, picks, chisels and so on through touchstones, burnishers; and sharpening stones. Many of the same categories would, of course, later be represented in Fox's collection as well.

When, exactly, Fox first became aware of Wilde's work and his catalogue is unknown, although it can be imagined that he probably knew of it soon after its publication. A review of the first part in the Archaeological Journal explained that it was more than simply an aid 'to the casual visitor of the Academy Museum' but 'a valuable accession to the Archaeological literature which deserves to form a place amongst works of reference in the libraries of all students of National Antiquities'¹⁷⁸. Charles Reed, a member of the Council of the Museum of the United Services Institution and a fellow of the Society of Antiquaries, referred to Wilde's collection as a matter of course during an exhibition of his collection in 1859¹⁷⁹. We can assume that Fox, who knew Reed well, would have been acquainted with it at least by then, if not earlier. Way certainly was aware of it long before that, probably even before its actual publication. The idea that the Irish collection might be organized according to a scheme modelled on the Linnaean taxonomy can in fact be traced back at least to J.M. Kemble's proposal to the Academy in 1846. Way certainly knew of that, and we again can assume that Fox probably did as well¹⁸⁰.

Whether Fox could be said to have been directly influenced by Wilde's example, or whether he simply saw it as a parallel to his own collection, is less clear and probably can never be known for certain. Fox probably first viewed the Academy Museum in 1862, or soon after first arriving in Ireland. There is little doubt that he visited the collection several times and in his papers on 'Primitive Warfare', Wilde's catalogue was a major reference¹⁸¹. His own handbook for his collection roughly followed Wilde's in format and was obviously intended to serve the same purpose—to act both as a general reference and as a guidebook for visitors. There is, unfortunately, no record of Fox and Wilde having

¹⁷⁸ Rev. of A Descriptive Catalogue of the Museum of Antiquities of the Royal Irish Academy, 1859, AJ, 14 (1857), 389.

¹⁷⁹ Charles Reed, 'Exhibition of the remains of an ancient canoe found in 1856', PSAL, 2dS 1 (1859), 10.

¹⁸⁰ J.M. Kemble, 'Introduction', AJ, 6 (1849), 1-3. See Kendrick, p. 138-40.

¹⁸¹ Fox first refers to the Royal Irish Academy collection in his 'Ivory Peg-top shaped object'. Also see 'Primitive Warfare I', pp. 636 and 645. 'Primitive Warfare II', pp. 418-19; 'Primitive Warfare III', p. 532 and 'On the Discovery of a Dug-Out canoe in the Thames at Hampton Court', JAI, 7 (1878), 103.

ever met or corresponded¹⁸². Wilde was, however, well established socially. In 1853, he was given the appointment of Surgeon-Oculist to the Queen in Ireland—a post especially created for him—and in 1864, he was knighted for his 'services to statistical science', largely as a result of his work on the medical component of the census. His practice was a fashionable one as well, and it is certainly possible that Fox or Alice came in contact with him in that regard. Fox may also have contacted Wilde in connection with antiquarian matters, particularly after he had begun his own series of excavations in the south, although no record of any exchange survives. Nonetheless, he certainly recognized his debt to Wilde, comparing his own collection to that of the Irish Academy on several occasions and admitting that his generally followed the example of that set out in that institution. His choice not to use the Linnaean system in any formal way suggests in itself an acknowledgment of the priority of Wilde's system.

9. Ethnographical Analogy

Although Wilde's example was obviously important to Fox, either confirming or helping to suggest Fox's own approach, there was one important difference. The collection with which Wilde was working was composed solely of prehistoric and slightly later antiquarian remains, whereas Fox's collection was made up principally of the artefacts of contemporary exotic peoples. Moreover, with its colorful feather ornaments, beaded leatherwork and brightly painted ceramics, Fox's collection must have offered a very different picture from that of the Royal Irish Academy. But to some extent Fox's collection was changing. His posting in Ireland provided Fox with an opportunity to add to his prehistoric series, and, in fact, because of his relative isolation, his sojourn in Ireland probably helped promote that aspect of his collection over earlier interests. His connection with other archaeologists, both in Ireland and in London, no doubt further encouraged Fox's involvement in that area, and we know that at least by 1869, the collection included stone, bronze and iron tools from France, Denmark, Switzerland and Austria in addition to English and Irish examples¹⁸³. As with the Royal Irish Academy collection, original examples were supplemented by drawings taken from publications or based on originals seen elsewhere; following Evans' example in particular, Fox tried his own hand at making flints as well¹⁸⁴.

In terms of its aims, it is worth re-emphasizing that Fox's ethnographical series were implicitly antiquarian in intent if not in terms of actual composition. Repeating a theme which could be said to have extended back at least to the writings of the French philosophes and the theories of Lord Monboddo (1714-1799), and the Scottish historical

¹⁸² Personal Communication, Brigid Dolan, Librarian, Royal Irish Academy, 26 Aug 1980. No visitors' book has survived.

¹⁸³ 'Primitive Warfare III'.

¹⁸⁴ Fox, 'Primitive Warfare, II', p. 419; 'Evolution of Culture', p. 506. See Evans, 'On the Manufacture of Stone Implements in Prehistoric Times', Trans. of the 3rd. Internatl. Congress of Prehistoric Arch., 194-215.

school¹⁸⁵, Fox assumed that what he referred to as 'modern savages' were in some way comparable to ancient European races and, in consequence, that their tools and implements stood as representations of ancient ones. But, still, the analogy was a qualified one. 'To what extent the modern savage represents primeval man is one of those problems archaeology is called upon to solve', Fox explained in 1874. 'That he does not truly represent him in all of the particulars we may be sure. Analogy would lead us to believe that he presents us with a traditional portrait of him rather than a photograph'.¹⁸⁶ Similarly, his tools presented only an approximation to those used by ancient man and not an equivalent to them.

Fox's interest in the comparative value of modern savage tools followed a pattern of long-standing tradition. Edward Llyud (1660-1709), the second Keeper of Oxford's Ashmolean Museum and a pioneering British topographer, writing in 1713 of the flint implements found in Scotland, and commonly attributed to 'faeries', explained: 'They are just the same chipped the nations of New England had their arrows with this day;' [*sic*] A half century later at the Society of Antiquaries, a Mr. Lort called attention to the similarities among Irish and Indian Celts, and in 1800 Thomas Ryder compared Welsh and African tools¹⁸⁷. But while casual comparisons of that kind continued well into the nineteenth century, around 1850, or just prior to Fox's active involvement in antiquarian circles, the comparison of exotic and ancient materials took on an entirely different character, becoming at once both far more systematic and far more detailed. There are a number of reasons for the change. First of all, there was the sudden increase in the number of exotic artefacts available. Exhibitions of metal work from India, Chinese porcelain and jade, American ceramics and figurines became more frequent at the meetings of all three major antiquarian societies and, to a lesser extent, of even small local ones¹⁸⁸. Closely allied to the sheer increase in numbers was the extension of the

¹⁸⁵ Gillispie, Monboddo's own principle work was on the Origin and Progress of Language (Edinburgh: J. Balfour, 1774). See Emily L. Lloyd, James Burnett, Lord Monbaddo (Oxford: Clarendon Press, 1972).

¹⁸⁶ *No footnote given*

¹⁸⁷ Edward Lloyd, 'Observations in Natural History and Antiquities, made in his Travels thru' Wales and Scotland', Philos. Trans., 28 (1714), 99; Lort, 'Observations on Celts'; Thomas Ryder, 'Account of Antiquities from St. Domingo', Archaeologia, 13 (1797), 206-07. Other similar observations can be found in Paul Demidoff's 'Some account of Certain Tartarian Antiquities', Archaeologia, 2 (1764), 222-35; William Bray's 'Observations on the Indian method of Picture-Writing', Archaeologia, 6 (1781), 159-62. Marc Lescarbot made the same comments in his The History of New France, trans. Will Grant (Toronto: The Champlain Society, 1814). For a general discussion of the 'comparative method' of an early period, see Hodgen, pp. 314-37.

¹⁸⁸ Compare the occasional displays of foreign or exotic objects during the early part of the nineteenth century with those recorded during the 1840s, 50s and 60s. To mention several examples: James Talbot de Malahide, 'Notice of some supposed Egyptian Remains in Upper Nubia', AJ, 4 (1847), 139-41; Mr. Empson, Exhibition of 'a collection of remarkable ancient Mexican Ornaments of gold', AJ, 7 (1850), 179; Nathaniel Gould, Exhibition of 'Six Burmese, or Chinese figures', JBAA, 6 (1850), 149; William Pettigrew, 'On Ancient Chinese Vases', JBAA, 8 (1852), 18-27; Octavius Morgan, Exhibition of 'a collection of Stone arrowheads, an axe, and a Skinning Knife from various parts of the United States of America', PSAL, 3 (1853), 21; 'African

tradition of connoisseurship to other areas, with Indian miniature paintings and Chinese cloisonné attracting a new set of collectors, for whom comparison with known European techniques was a matter of some interest¹⁸⁹. Thirdly, there was the Three Age System and its implications. Indeed, after 1850, with the growing acceptance of the Danish system by British antiquarians, the Three Age System had become an implicit reference in almost every presentation¹⁹⁰. Finally, at least by the end of the decade, there were the questions arising from the evidence of man's antiquity. Were the tools of ancient man found on the banks of the Somme or the Thames, in Fox's case—the same as those still used by modern savages? What could current techniques, such as methods of hafting or manufacture, tell the antiquarian about the methods of prehistoric man? Had there been actual connections between various races and could those connections be traced through a comparison of implements? What generalizations could be made about the life of prehistoric times based on what was known about the life of contemporary exotic peoples? Or simply, (as Fox had asked), to what extent could the 'modern savage' be said to represent 'primeval man'¹⁹¹.

Not surprisingly, such a concentration of interests had an immediate and important impact on other collections of the period. Again, the Danish National Museum provided the ideal. Beginning as early as 1828, when the Royal collections of Arts and Curiosities was displaced in favour of a more comprehensive scheme, Thomsen began to reorganize the national collections of ethnological materials to serve as an explicit complement to the prehistoric remains. Spread over thirty rooms of the adjacent Christiansborg Palace, the whole collection was divided, at least by mid-century, into three main categories, that

Ring Money', *AJ*, 12 (1835), 179; etc. For the change in subjects at the Society of Antiquaries, see Evans, *Antiquaries*, pp. 275-77.

¹⁸⁹ See Mr. Henderson, Exhibition of 'a Chinese bronze vase', *AJ*, 18 (1861), 88; George Chapman, Exhibition of 'three specimens of Chinese cloisonné enamels', *PSAL*, 2dS, 1 (1861), 412-13; Edward Canton through W.L. Lawrence, 'Exhibitions of a Hindoo idol', *PSAL*, 2 (1862), 75, etc.

¹⁹⁰ For example: J.Y. Akerman, 'Weapons of the Celtic and Teutonic Races'; Edward Hawkins, 'A dissertation on the various types of personal ornaments brought from Tunis', *AJ*, 9 (1851), 90; Talbot de Malahide, Exhibition of 'several bridle bits from Afghanistan', *AJ*, 9 (1852), 388. In each case exotic weapons and other objects are compared with various types of ancient European manufacture. The numbers of such articles increase appreciably during the early 1860s. See, for example, William Blackstone, Exhibition of 'specimens of arrowheads, knives ...', *AJ*, 18 (1860), 75; George Godwin, Exhibition of 'an ancient war-club', *JBAA*, 32 (1866), 241; J.B. Greenshields, Exhibition of 'some articles ... from Egypt and ... Canada', *JBAA*, 22 (1866), 242-43.

¹⁹¹ Systematic comparisons of stone tools, particularly those of the Somme with English and exotic examples include H. Syer Cuming's 'Old English Arrow-Heads'; R.A. Godwin-Austen's 'Specimens of the remarkable flint implements discovered in the Valley of the Somme near Amiens', *AJ*, 18 (1860), 170. Discussions of manufacture include: W. J. Bernard Smith's Exhibition of 'an adze of jade, from New Zealand', *AJ*, 9 (1852), 298; George Musgrave, Exhibition of 'a pen-and-ink sketch of a Stone Axe', *PSAL*, 4 (1857), 212. Systematic comparison of 'stages' of culture or civilisation and the manufacture of objects can be traced back at least to Syer Cuming's and 'Weapons and Armour of Horn'; 'The Meri of New Zealand'. By the 1860's such comparisons were typical.

of (1) nations not possessing or previous to possessing the use of metal, (2) nations possessing the use of metal but destitute of literature, (3) nations possessing the use of metal and having literature of some kind. Geographical or cultural categories were, in turn, subsumed by that division. Described by Westwood in 1858, as putting 'our great national establishment to the blush', the Danish example became, if anything, even more important during the 1860s, as interest in the comparative use of ethnography increased.¹⁹² Paradoxically, however, Worsaae was already beginning to rearrange ethnography to conform to the more conventional geographical method by the time Fox would have been acquainted with it. But still, the precedent must have been recognized.

While Fox, therefore, was clearly aware of the techniques used in the Danish national collection, it was the collection of fellow British antiquarian, Franks' close friend Henry Christy, which was probably of more immediate interest. Christy's involvement as a collector provides an interesting parallel to that of Fox's, as Michael Thompson has observed¹⁹³. The son of a London banker, Christy had become interested in the study of antiquities as a result of the Great Exhibition. Like Fox and many others, he was obviously struck by the general vision of universal progress it conveyed¹⁹⁴. Christy's own attentions had centred on Middle Eastern antiquities, and again, like Fox, he was obviously drawn to archaeology by the example it offered. During the 1850s, he had turned to travel, visiting Asian and African countries immediately after the Great Exhibition and Mexico in 1857-59. His adventures there, undertaken at least in part in order to expand his antiquarian collection, were told by his young travelling companion, and Fox's later associate, Edward Burnett Tylor¹⁹⁵. Profoundly affected by the discoveries in France, Christy had, by 1860, committed himself to further excavations in the Somme, coming in contact with de Perthes and allying himself with the French palaeontologist, Édouard Lartet (1801-1871). It was Christy, who, together with Lartet, was responsible for bringing the famous Palaeolithic bone carvings, discovered in the Dordogne Valley in

¹⁹² Westwood, 'Notes of a Tour', p. 139. Other descriptions of the ethnographical portion of the Danish National Museum are found in Daniel, *A Hundred and Fifty Years*, p. 51; Bahnson; Hermansen; Birket-Smith, pp. 115-20; Sturtevant, p. 621 and Frese, p. 42.

¹⁹³ Thompson, *General Pitt-Rivers*, p. 20-21, 31.

¹⁹⁴ Marett, *Tylor*, p. 30. Other background on Christy is found in the *DNB*; Murray, II, append; Edwards, *Lives of Founders*, II, 697-99. Penniman, pp. 53-54; Bazin, *Museum Age*, p. 210; Miller, pp. 314-16. Brew, pp. 63-69; H. J. Braunholtz, 'History of Ethnography in the Museum after 1753, Pt. I and II', *BMQ*, 18 (1953), 90-93; rpt. in *Sir Hans Sloane and Ethnography*, ed. by William Fagg (London: The Trustees of the British Museum, 1970), p. 38. Manuscript notes on his life are held at the British Library: 'A Few notes re Henry Christy (Esq)' presented by St. Clair Badeley, BL, MS 45, 159; Letters and Journal Add MS/58369. Christy was admitted to the Society of Antiquaries on 18 Dec 1862 or shortly before Fox. He was particularly active as an exhibitor. See Christy, Exhibition of 'three oblong copper plates', *PSAL*, 2dS 2 (1862), 80; Exhibition of objects donated to the British Museum, *PSAL*, 2dS 2 (1863), 300-01; Exhibition of 'a gold coin of Cunobeline ...', *PSAL*, 2dS 2 (1863), 329. An Obituary recounting his contributions was published in *PSAL*, 2dS 3 (1866), 287-88.

¹⁹⁵ E.B. Tylor, *Anahuac: or Mexico and the Mexicans, Ancient and Modern* (London: Longman, Green, Longman and Roberts, 1861). Also see BL, Add MS 58369, for Christy's own account.

1860, to the attention of British antiquarians and to the general public.¹⁹⁶

When precisely Christy began to collect ethnographical materials as a supplement to his prehistoric series is less clear. Fox later emphasized that he had, in fact, met Christy before Christy's own interest had extended in that direction, implying that Fox had some influence on Christy's own decision¹⁹⁷. Fox and Christy must have met well before 1863, when Christy supported Fox's candidature at the Society of Antiquaries. It is probable that Franks, through the intermediation of Way, was responsible for bringing the two collectors together some time prior to Fox's move to Ireland. (Christy was also present at the Sotheby sales which Fox was beginning to attend in the early sixties¹⁹⁸.) Finally, Arthur Tupper, Fox's friend from the United Services Institution, lived only a few doors down from Christy on Victoria Street, Westminster and was apparently in close contact with him as well¹⁹⁹.

Fox was careful to call attention to the difference between his and Christy's collections, suggesting that 'in the Christy collection the arrangement was geographical, whereas I have from the first collected and arranged by form'²⁰⁰. A catalogue prepared for Christy by Carl Ludwig Steinhauer of the Danish National Museum in 1862, generally confirms Fox's assessment. The collection was at that date divided into two major sections: 'Antiquities' and 'Ethnography'. Antiquities included examples from Scandinavia, Great Britain and Ireland and France. Those were divided into 'early' and 'later' Stone Age tools (in reference to Lubbock's Palaeolithic and Neolithic) and tools dating from later than the Stone Age. Ethnography included articles from Greenland, the 'Caribes', the Incas or ancient Peruvians, 'ancient Mexicans-Taltecs and Aztecs', modern Mexico, North America (the Eskimo), North America (the Indians), South America, Australia and Oceania (with several subdivisions), Asiatic Archipelago, Africa, Ireland. Notwithstanding Fox's characterization, there was some allowance for use or thematic considerations, such as a special series entitled 'War Weapons, and implements used in hunting, fishing and navigation'. Throughout, therefore, Christy's aim was explicitly comparative, as Fox must have been well aware²⁰¹.

¹⁹⁶ Christy and Lartet's work is recorded in *Reliquiae Aquitanicae*, ed. by Thomas Rupert Jones, 2 vols. (London: Williams and Norgate 1875). Also in Lartet's 'On the coexistence of Man with certain Extinct Quadrupeds ...', *JGSL*, 16 (1860), 471-79. See Daniel, *A Hundred and Fifty Years*, pp. 78-79; Penniman, pp. 53-54. 'On some Arrow-heads and other Instruments found with Horns of *Cervus Magaceros* in a Cavern in Languedoc', *JGSL*, 16 (1860), 491-92; and Christy's 'On the Prehistoric Cave-Dwellers of Southern France', *TESL*, 3 (1863), 362-72.

¹⁹⁷ Fox, *Catalogue*, p. xlii; SSW, PRP, P 110. See also 'Primitive Warfare I', p. 631.

¹⁹⁸ BL, SSC.

¹⁹⁹ Tupper at least once exhibited an article for Christy at the Society of Antiquaries. A.C. Tupper, Exhibition of 'two singular sets of keys', *PSAL*, 2dS 3 (1865), 76-77.

²⁰⁰ Fox, *Catalogue*, p. xiii.

²⁰¹ *Catalogue of a Collection of Ancient and Modern Stone Implements and other Weapons, Tools and Utensils of the Aborigines of Various Countries in the possession of Henry Christy, F.G.S., etc.* (London: For Private Distribution, 1862). Steinhauer had earlier produced a catalogue for the Danish National Museum. C.L. Steinhauer, *Kort Veiledning i det Ethnographiske Museum* (Copenhagen: Bianco Lunos Bogtrykkeri, 1859).

Christy died in 1865, at the comparatively early age of 55, leaving his collection, together with a small endowment, in the charge of four trustees, Franks among them. Within six months it had been offered to the British Museum, which immediately accepted it, although for reasons of space the Museum was forced to leave it in Christy's apartments at 105 Victoria Street until 1883, when it was merged with the other British antiquarian and ethnographical collections. It was in such a curious position that Fox must have been most familiar with the collection, by that time, in fact, reorganized along even more strictly comparative lines, and it is apparent that he concentrated a great deal of his attention on his old associate's collection, even going so far as to make facsimiles of certain specimens for his own. Surprisingly, Fox made few contributions to the growing collection himself²⁰², unlike many others such as Albert Way, Hodder Westropp and Richard Burton, but then, of course, he was intent upon expanding his own.

Another collection of which Fox must have been aware was that of William Blackmore. Located after 1864, in Salisbury where it formed the nucleus of the city's museum on St. Ann's Street, Blackmore's collection followed the usual pattern²⁰³. Like Christy, Blackmore had originally concentrated on antiquities. In 1864, he had the good fortune of obtaining the famous collection of prehistoric remains unearthed in Ohio by the American archaeologist, E. G. Squire (1821-1888), previously the subject of the fledgling Smithsonian Institution's first major monograph, *The Ancient Monuments of the Mississippi Valley*²⁰⁴. The Ohio mound materials were supplemented by other prehistoric and ethnographical pieces, and by the time of Blackmore's bequest his collection included examples from Africa, Asia, and Australia as well as other areas. Again, the latter were intended to serve as a supplement to the prehistoric series. Arranged by Edward T. Stevens beginning in 1864, prehistoric materials occupied the crenellated and buttressed cabinets in the centre of the room. 'Objects to aid in their illustration obtained from uncivilized nations' were, as one visitor explained in 1864, 'placed around the walls'²⁰⁵. Also, as with Christy's collection, while the relationship was not explicitly demonstrated in its organization, the message which proximity alone was meant to convey was clear.

²⁰² With the exception of a donation of a few Cissbury pieces in 1868. See A.W. Franks, Catalogue of the Christy Collection of Prehistoric Antiquities and Ethnography (London: by Order of the Trustees of the British Museum, 1870), p. 1; British Museum, Book of Presents, 1866-68, f. 579.

²⁰³ Blackmore and his museum are described in E.T. Stevens, Descriptive Catalogue of the Salisbury and South Wilts Museum (Salisbury: Salisbury and South Wilts Museum, 1864); Guide to the Blackmore Museum, Salisbury (London: Bell and Daldy, n.d.); Flint Chips: A Guide to Prehistoric Archaeology as illustrated by the Collection in the Blackmore Museum, Salisbury (London: Bell and Daldy, n.d.); and Some Account of the Blackmore Museum Salisbury: The Opening Meeting (London: Bell and Daldy for the Wilts. Arch. and Nat. Hist. Soc. 1867). A later account was prepared by Frank Stevens, The Salisbury Museums, 1861-1947: A Record of Eighty-Six Years' Progress (Salisbury: Salisbury and South Wilts Museum, 1947). And the Museum is described with great affection by Stuart Piggott in 'Prehistory and the Romantic Movement', pp. 27-38.

²⁰⁴ E.G. Squier and E.R. Davis, Ancient Monuments of the Mississippi Valley, Smithsonian Contributions to Knowledge, Vol. I (Washington, D.C.: Smithsonian Institution, 1848).

²⁰⁵ [T.J. Pettigrew?], 'Salisbury and South Wilts Museum', JBAA, 20 (1864), 94. Also see Archaeological Intelligence, AJ, 27 (1869), 80.

Fox appears to have visited the Blackmore collection on a number of occasions and was obviously in close contact with both Stevens and Blackmore, at least at a later period²⁰⁶. Again, their influence, and that of the Blackmore collection, would seem undeniable.

By the mid-1860s, therefore, or when Fox first began to make his collection known to antiquarians, the comparative value of ethnographical materials in European museums was becoming well accepted. Of course, both antiquarian remains and those of contemporary peoples had always been linked, at least casually. The British Museum's antiquarian and ethnographical materials, for example, had been closely allied both administratively and in terms of their arrangement, at least since 1836, when ethnography was transferred out of the Department of Natural History and Modern Curiosities in the new Department of Antiquities. But in 1866, the relationship was given stronger recognition in the formation of the new department, British and Medieval Antiquities and Ethnography under the direct control of Franks. Still organized according to what was known as the geographical system, the two collections were nonetheless seen as increasingly complementary. For many, including Fox, it must have seemed that their full potential was for the first time being realized.

But while Fox's collection followed the pattern of other collections, it was distinguished in points of detail, as Fox himself repeatedly stressed. For one, it had begun as a collection of comparative technology, not as a collection of prehistoric implements. The progression was, therefore, reversed. Secondly, as Fox emphasized, the ethnographical series were not simply placed alongside, as a kind of addendum, but formed the central core of the collection even after the addition of prehistoric or archaeological remains. Rather than grouping the latter by region, as had Christy or Blackmore, Fox organized his ethnographical pieces by subject to illustrate a single unified principle. Finally, just as the sequence was reversed, so was the general aim. For Fox, the object of his ethnographical series was not simply to help fill in an incomplete archaeological record, although, of course, that was a part of his purpose, but to offer a comparably effective historical tool for the investigation of exotic cultures. The last point becomes apparent as early as 1867, with the publication of his paper on the Irish Ogham inscriptions. Discussing the similarities between the Irish inscriptions and those of Eskimos, Fox suggests not only that they provided a parallel, but 'that a race akin to the Eskimo in their arts and implements, if not the Eskimo race itself, did actually occupy Europe in conjunction with the reindeer at a time anterior to that in which the Ogham character must have originated in Britain and Ireland'²⁰⁷. Recalling the racial and migrationist theories of Thomsen and Worsaae, and their own understanding of the value of collections to reveal the hidden

²⁰⁶ Stevens was active at the British Archaeological Association in particular (E.T. Stevens, see communication 'on the discovery of flint implements', *JBAA*, 20 (1863), 335-37) and was in contact with Fox on a number of occasions. See Fox, 'On the proposed Exploration of Stonehenge, by a Committee of the British Association', *JESL*, NS 2 (1870), 1; *Catalogue*, p. 7. Fox and Blackmore served concurrently on the Council of the Ethnological Society, List of Members, *TESL*, 7 (1868). Fox's connection with the Salisbury Museum became stronger after 1880 when he moved to Rushmore. Among his papers are a typescript of a speech delivered there. *SSW*, PRP, P 142.

²⁰⁷ Fox, 'Roovemore Fort', p. 134.

events of history, Fox was obviously concerned to promote the museum as a means of reconstructing the past, not only of Europe, but of people of other 'races' as well. The lesson of the Three Age System was simply being transferred to a more universal context.

