

# Hunters, dealers, collectors and scientists and the origins of the Elliot Smith Primate Collection at University College London

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**Abstract:** Many primates are now listed as endangered species and so historical museum collections that contain primate remains have become an invaluable research resource that can never be replaced. Consequently, it is increasingly important that we document what is known about the origins and the age of specimens in our museums. The Elliot Smith Primate Collection at UCL originated at a time of change immediately after the First World War and while primarily a research collection it was used to teach aspects of comparative anatomy to generations of medical and dental students until the late 1980s. The lives of the people involved in acquiring and using the collection at the turn of the twentieth century provide us with a fascinating insight into their attitudes and ambitions and on what, sadly, was once considered acceptable collecting practise at the time.

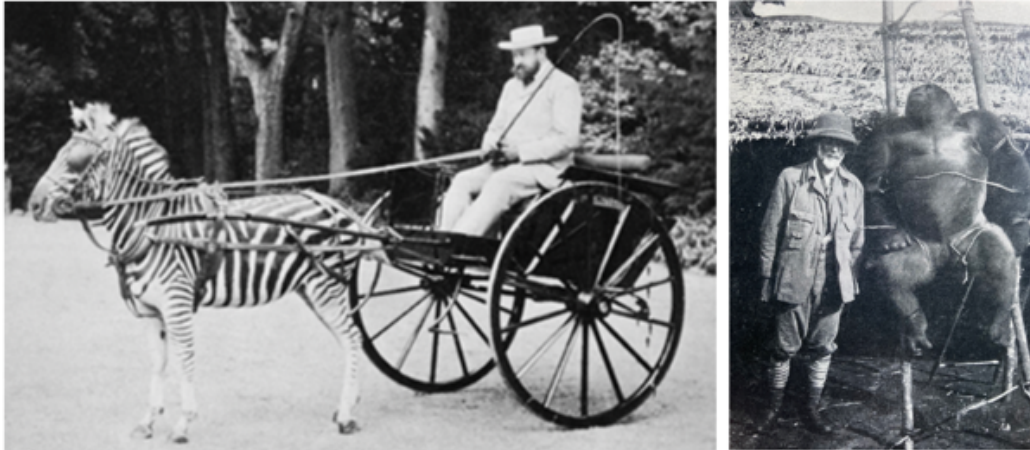
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## Introduction

Many collections of primate material have their origins in the late nineteenth or early twentieth centuries. For the most part these collections arose for one of three reasons. First, it was once common-place for individuals with the means to amass private collections that would often include examples of diverse animal, plant and/or fossil remains. Notable examples include Lionel Walter Rothschild, 2<sup>nd</sup> Baron Rothschild, (1868-1937), and Major Percy H. G. Powell-Cotton (1866-1940). Walter Rothschild was born into a prominent banking family but through his passion for natural history, particularly ornithology, built up a large private museum of natural history at Tring in Hertfordshire (Fig. 1). Rothschild also had a special interest in the great apes<sup>1</sup>. Major Percy Powell-Cotton grew up with a passion for natural history, particularly wildlife, hunting and ethnography. After an early military career, and in collaboration with various well-known hunters, Powell-Cotton (Fig. 1) embarked on a series of expeditions which led directly to the creation of the Powell-Cotton Museum. He brought back large numbers of zoological specimens and contracted the taxidermist, Rowland Ward (Fig. 2) of Piccadilly, London, to prepare many of them for display and enlisted his brother Gerald to oversee the construction of a museum in the grounds of the family home,

Quex House, Birchington, Kent. The Powell-Cotton Museum came to contain large numbers of zoological specimens and ethnographical items collected across Africa and Asia between 1887 and 1939. It still contains the best documented collection of African great ape skulls, skeletons and skins in the UK.

**Figure 1**



Baron Lionel Walter Rothschild amassed an enormous collection in his personal museum and trained zebras to pull a trap seen here at Tring in Hertfordshire circa 1898. Major Percy H. G. Powell Cotton seen here in Cameroon, West Africa with a recently shot male gorilla circa 1930. (Images in the public domain).

A second group of collections containing primate material in the UK began as teaching collections in universities, medical schools and other institutions. An example is the anatomy museum at The Royal Veterinary College, University of London, founded in 1791 but perhaps the most notable is the Grant Museum of Zoology and Comparative Anatomy at University College London. Robert Edmond Grant (1793-1874) had taught medicine at Edinburgh University but moved to London in 1828 where he discovered there was no material with which to teach zoology in the then newly established UCL. Over his long career at UCL until 1875, Grant (Fig. 2) built up a diverse and rare collection of specimens spanning the whole animal kingdom and including many primates. Since that time, many medical schools, and particularly dental schools where comparative anatomy was part of the taught curriculum, acquired specimens primarily for teaching purposes that still now include rare and important specimens. Some of these collections that contain primate material are listed in Jenkins<sup>2</sup>.

A third group of collections that contain important primate material arose primarily as research collections. John Hunter (1728-1793) was a Scottish surgeon who assisted his brother William, (1718-1783), in his London medical school (originally on the site of the present Apple store in Covent Garden). John Hunter's passion was for research, preparation and experimentation towards a better understanding of structure, function, pathology and surgery and of the natural world in general. The results of his lifetimes work grew into the Hunterian Museum that was eventually inherited by The Royal College of Surgeons of England. Through John Hunter's successors, William Clift (1775-1849) and then Richard Owen (1804-1892) the Hunterian Museum came to contain some of the rarest and most diverse zoological specimens including many primate specimens.

**Figure 2**



Museum curators, taxidermists, adventurers, collectors and hunters of the late nineteenth century. (All images in the public domain).

### **Hunters, collectors and dealers**

The original British Museum in Bloomsbury grew out of the purchase by the British Government in 1753 of the private collection of Sir Hans Sloan (1660-1753) as well as the purchase of the mammal catalogues of the Zoological Society of London museum and much of that museum's collection<sup>3-6</sup>. In 1841, Edward Gerrard (1810-1910), who had until this time been a joint Curator of the Zoological Society of London's museum, transferred to the natural history department of the British Museum where he helped move the collections from their old location in Montagu House, Great Russell Street, to the new museum buildings in Bloomsbury<sup>7</sup> (Fig. 2). Gerrard's job was to assist John E. Gray (1800-1875), keeper of zoology from 1840-1874, in building up a broad and representative skeletal collection but he also used his connections with the Zoological Society of London and the British Museum to open his own taxidermy business in nearby Camden Town at 61 College Place, close to the Royal Veterinary College on Royal College Street<sup>7</sup>. In 1856 Richard Owen (Fig. 2) was appointed superintendent of the British Museum's natural history collections and it was Owen who campaigned for a National Museum of Natural History that should be accessible to all and also quickly spearheaded the need to move to larger purpose-built premises in South Kensington, the British Museum (Natural History) as it was then and Natural History Museum as it is now. This eventually opened in 1881.

Well before the end of the nineteenth century, Gerrard's workshops in Camden Town became a famous meeting place for hunters, travellers and naturalists to meet and exchange or sell specimens<sup>7</sup>. During the late nineteenth century both the Royal College of Surgeons of England and the British Museum (Natural History) continued to obtain specimens directly from explorers and hunters but also from local dealers such as Rowland Ward and Edward Gerrard. Among those who hunted and sold great ape material in London were Sir James

Brooke (1803-1868, Fig. 2), soldier, adventurer, Governor (and then subsequently Rajah of Sarawak). Brooke is reported on one occasion to have supplied 25 skulls and 17 orangutan skeletons to the British Museum in 1841<sup>5</sup> and Alfred Russel Wallace (1823-1913, Fig. 2) who from 1855, “*shot and procured as many orangutan specimens as he could*”, shipped skins, skulls and skeletons back to his agent for sale in London<sup>8</sup>. In 1861, the explorer and hunter Paul Du Chaillu (1831-1903, Fig. 2) also sold chimpanzee and gorilla skulls and skeletons from Gabon to the Natural History Museum, London, as well as supplying Gerrard’s to order, who by 1865 were shipping skeletal material and mounted great ape specimens as far afield as the Melbourne Museum, Australia<sup>7</sup>. Despite this, prior to 1861 the British Museum (Natural History) still had fewer than 10 chimpanzee and 10 gorilla specimens and fewer than 25 orangutan specimens listed in its mammal collection<sup>3</sup>.

### **Fossil discoveries and the rise of comparative primate anatomy**

Following the increasingly spectacular palaeoanthropological discoveries in Europe, including those of Neanderthals in Germany in 1856, and then in Belgium and France, scientists in the UK were increasingly eager to compete. Alfred Hart Everett (1848-1898), encouraged and supported among others by Charles Darwin and Alfred Russel Wallace, obtained funds from the Royal Society and The British Association to explore the Niah caves of Sarawak in 1878-79 to search for evidence of early fossil hominins<sup>9</sup>. This only eventually came true twelve years later when the Dutch anatomist and doctor, Eugène Dubois (Fig. 2), discovered the fossil remains of Java Man in 1891 on the banks of the Solo river at Trinil, yet again frustrating the aspirations of anatomists and scientists in the UK. While Everett’s 1878-79 expedition was something of a disappointment he did nonetheless return with a quantity of sub-fossil and modern comparative material that was then largely distributed to the Royal College of Surgeons of England and the British Museum (Natural History). In particular, his collection of orangutan material, now at the Natural History Museum, as well as other material he may have passed on to private collectors, has come under scrutiny as the potential source of the famous ‘fossil’ Piltdown mandible found in Sussex in 1912<sup>5</sup>. The Piltdown fossils and the associated stone and bone tools were in fact forged, partly from an orangutan mandible, by a local solicitor, Charles Dawson<sup>10</sup>. Intriguingly, however, at present, the smallest orangutan cranium, and missing a mandible, in London, and one that matches the Piltdown mandible in size and surface texture and easily accommodates the Piltdown canine tooth (Fig. 3), resides in the Elliot Smith Collection (number CA 27, but with a much older accession number 1142 of unknown origin also clearly visible). Dawson, seen holding his reconstructed skull in figure 4, cleverly took advantage of an over-enthusiastic scientific community eager to put the UK at the forefront of anthropological breakthroughs and in so doing drew many anatomists into bitter disputes with each other about early human evolution. This changed the focus of research in many UK anatomy departments and museums and it was the resulting renewed interest in human and great ape comparative anatomy at this time that further contributed to the expansion of many primate collections.

**Figure 3**



The Piltdown mandible and lower right canine (placed here, wrongly<sup>10</sup>, as a maxillary left canine as proposed by the London dentist Alvin Marston 1889-1971) together with the small female orangutan cranium CA27, 1142, from the Elliot Smith Collection.

At the time of the Piltdown forgery the primate collection of The Royal College of Surgeons of England was as extensive as that at the British Museum (Natural History), if not more so, and was used in preference by Charles Dawson to devise and concoct many of his ideas, even under the nose of its then Hunterian Professor, Arthur Keith<sup>11</sup>. Prominent anatomists such as George Busk (1807-1886), Charles Tomes (1846-1928), Arthur Keith (1866-1955, Fig 4), Frank Colyer (1866-1954, Fig. 4), Osman Hill (1901-1975) and Alexander (A.J.E.) Cave (1900-2000) all subsequently promoted the comparative primate research collections at the Royal College of Surgeons of England but also eventually donated their own personal collections to the College<sup>12-14</sup>. The result is one of the most comprehensive odontological and comparative craniodental collections in the UK, if not worldwide. In the 1920's and 1930's the primate collection at the Natural History Museum also continued to grow with new acquisitions of private collections and with bequests, notably from Walter Rothschild who left his whole museum and its contents to the British Museum (Natural History) in 1937.

**Figure 4**



Charles Dawson, the solicitor who fabricated the Piltdown remains held here in his hands circa 1913, with the anatomists and comparative anatomists closely involved in comparative craniodental research in the early twentieth century. (Image of Colyer taken from Miles and Grigson, (1990)<sup>13</sup> and courtesy of RCS. All other images in the public domain).

### **The origins of the Elliot Smith Collection at UCL**

Generations of medical students, but in particular dental students who were all examined in comparative craniodental anatomy in their first year of university, were taught in practical classes with specimens from the Elliot Smith Collection at UCL. Its precise history is undocumented but its origins clearly derive from a time when there was a major shift in attitude towards anatomical research at UCL and there are clear links to the network of hunters, dealers and researchers and to other historic collections in the UK. The driving force behind the need for such a collection was probably the assumption in the early twentieth century, in the UK at least, that anatomists rather than zoologists or palaeontologists should lead the way in studies of human evolution and great ape comparative anatomy. In this sense, unlike the Grant Museum at UCL, the Elliot Smith Collection was unlikely to have been created for teaching purposes nor was it intended as a museum collection to simply display individual representatives of taxa across hugely diverse groups of animals.

The Elliot Smith Collection at UCL is primarily a collection of primate skulls and skeletons and contains over 135 primate specimens including more than 50 mostly wild-shot great ape specimens (Table 1). What stands out is the large number of infant, juvenile and subadult specimens that make up a fairly comprehensive growth series for each great ape taxon (Fig. 5). This also holds true for the 40 or so *Cercopithecus* monkey specimens of which 29 are also either infant, juvenile or subadult specimens. Another remarkable fact is that for each of the great ape taxa there are complete mounted skeletons of a male and a female and there are further mounted specimens of juvenile chimpanzees, baboons and a

gibbon. In short, the collection seems designed to enable research questions rather than serve the needs of teaching or of a museum.

**Figure 5**



Some of the great ape and monkey skulls of the Elliot Smith Collection at UCL arranged here as growth series in their original glass wall cabinets.

The catalogue numbers run from CA01 (it is presumed that CA stands for Comparative Anatomy) to CA92 in order through *Gorilla gorilla*, *Pan troglodytes*, *Pongo pygmaeus*, *Hylobates* (Sp. Id.) and *Cercopithecus* sp. Other specimens (not only primates) appear to have been added either intermittently as they became available or in the case of some non-primate specimens at a later time. The first published reference to specimens in this collection appeared in a paper written by Solly Zuckerman (Fig. 4) in 1928 alongside a description of the developing dentitions and cranial capacities of 97 of them<sup>15</sup>. Among the others listed were 4 from the Zoological Society of London, 32 from the Royal College of Surgeons collection, 24 from the Rothschild Collection and 41 from the British Museum (Natural History), all collections that had grown considerably by this time. In all, Zuckerman<sup>15</sup> listed 112 chimpanzee specimens located in and around London at that time 40 of which were immature. His description of the UCL Elliot Smith specimens (8 infant, juvenile and subadult specimens, CA11, CA12, CA13, CA14, CA14a, CA14b, CA14c, CA14d) matches the dental development status of each as observed today and so dates the collection and the latest catalogue system to a time prior to November 1927 when this paper was submitted for publication. Interestingly, nine of the 18 *Pongo pygmaeus* specimens in the Elliot Smith Collection were more than likely acquired as a single batch and each have the accession

number CA28. Eight of these have an additional suffix -JS2 through -JS8 and one, (CA28-JS4) is also marked 18.1.23 that may be a date.

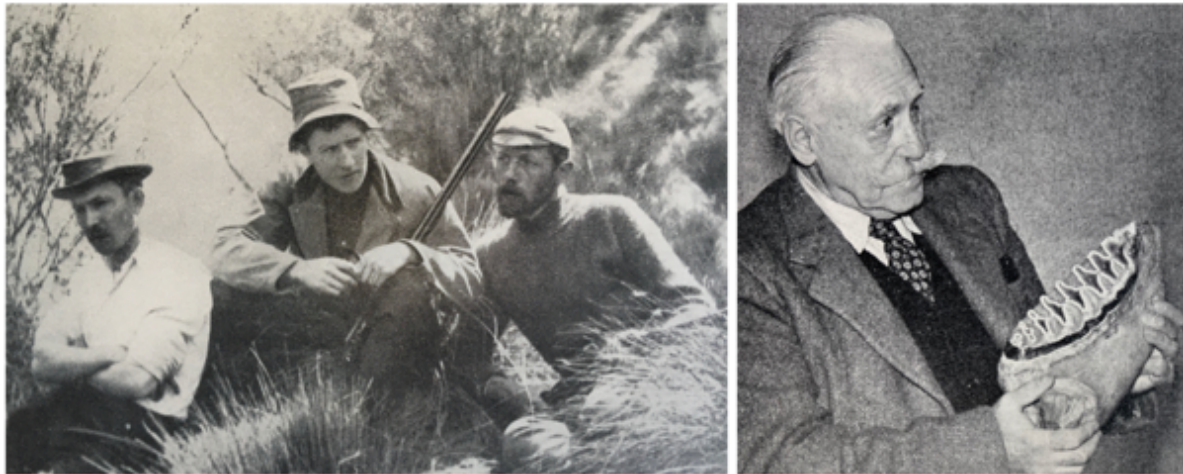
### **Elliot Smith transforms anatomy at UCL**

Sir George Dancer Thane (1850-1930, Fig. 4) had entered UCL as a medical student in 1867 and held the chair of anatomy there from 1877-1919 during which time, according to Sir Arthur Keith<sup>16</sup> who in 1892 briefly worked under Thane as a young anatomy demonstrator, things had stagnated and Thane's anatomy lectures had become especially boring<sup>16</sup>. Keith, full of enthusiasm for primate comparative anatomy and human evolution, was not understood by Thane at all but he was still granted permission to receive and dissect primates that had died at the nearby London Zoo from the prosector there, Frank Beddard<sup>16</sup>. It is possible some of the older specimens in the Elliot Smith Collection date from this time, but more likely that Keith kept them as part of his own personal collection. In 1919, the year after the end of the First World War, UCL appointed Grafton Elliot Smith (1871-1937) as its new professor of anatomy (Fig. 4). Elliot Smith, while primarily a comparative neuroscientist, was also deeply involved in studies of human evolution and had played a very public role in supporting Sir Arthur Smith Woodward at the British Museum (Natural History) in his efforts to defend the Piltdown fossils, presumed wrongly by Woodward, Elliot Smith and many others to represent the 'earliest Englishman'. Besides this, Elliot Smith had bigger visions for medical education and anatomical research. Alongside a fellow surgeon and war artist, Henry Tonks (1862-1937), who had been appointed Slade professor of fine art at UCL in 1918, Elliot Smith devised a compulsory course in human anatomy for all Slade fine art students. Among plastic surgeons and maxillofacial surgeons Tonks is best known for his watercolours and drawings of war wounds and their surgical repair but at UCL his reputation was as a renowned but formidable teacher of fine art. Elliot Smith quickly raised £370,000 from the Rockefeller Foundation in the USA to build a new institute of anatomy at UCL focused on neuroscience but also, alongside others at UCL, a further £835,000 to fund and promote the teaching of clinical medicine as separate modular disciplines, as we do today, rather than as a single seamless subject<sup>17</sup>.

One of the anatomy demonstrators to join Elliot Smith's department in 1919 was a young doctor, Raymond Dart (1893-1988, Fig. 4) later to become professor of anatomy at the University of the Witwatersrand, South Africa. At the same time, Elliot Smith had learned that the brilliant Russian neurohistologist, and by then Imperial Minister of Education for all of Russia, Nikolai Kulchitsky (1856-1925) had fled the Bolshevik armies with his family and was now penniless in London and so Elliot Smith assigned him to Dart as an assistant to pass on his knowledge of neuroanatomy, histology and staining techniques<sup>18</sup>. Not long after leaving UCL in 1923 Dart boldly published a paper in *Nature*<sup>19</sup> describing the first juvenile fossil hominin to be found in Africa. Found in a limestone quarry at Taung, South Africa, it became known as the Taung child. It is quite likely Dart had become very familiar with juvenile great ape craniodental anatomy while at UCL having had access to whatever specimens in the Elliot Smith Collection had already been acquired by that time. However, it was strong opposition to Dart's claims about the Taung child, and in particular its hominin status, that fuelled Zuckerman's 1928 study<sup>15</sup> of chimpanzee brain development that was of course sponsored and communicated by, and quite likely proposed by, Elliot Smith and carried out and written up while Zuckerman was in the anatomy department at UCL<sup>15</sup>.



**Figure 6**



Left: Elliot Smith (seated left) J. P. Hill (centre) and J. T Wilson (seated right; later to become professor of anatomy at Cambridge, UK) hunting for platypus on the Duckmarsi River, Blue Mountains, NSW, Australia, September 1895 (from Dawson, 1958<sup>17</sup>). Right: Fred Merfield, adventurer and hunter who worked closely with Major Powell Cotton hunting in Africa seen here holding an African elephant molar tooth circa 1940 (from Merfield, 1956<sup>20</sup>).

During his early days in Sydney, Australia, in the early 1890s (Fig. 6) Elliot Smith had met James Peter Hill (1873-1954), a young Scottish zoology demonstrator, who subsequently in 1906 became Jodrell Professor of Zoology and Curator of the Grant Museum at UCL. With Elliot Smith's arrival at UCL in 1919, Hill soon joined the newly formed Department of Anatomy in 1921 and went on to become its Professor of Embryology and Histology. Regarded as a rather dour Scot (Fig. 4) and nicknamed 'old oatmeal' by his colleague Sir Gavin De Beer, Hill remained in the department until 1954 when he succumbed to a terrible London smog. It seems highly likely given Hill's experience in acquiring and curating specimens for the Grant Museum at UCL that he would have had a role in setting up the Elliot Smith Collection and even perhaps in transferring some specimens from one collection to the other. In his book '*Gorillas were my neighbours*', Fred Merfield<sup>20</sup>, a renowned hunter and adventurer (Fig. 6) who worked closely with Major Percy Powell Cotton in Africa, writes that he supplied Professor Hill at UCL with great ape and embryological material as well as supplying Sir Frank Colyer who had requested any skulls that showed signs of dental decay<sup>20</sup>. Later on, following their 1932-1939 field trips to Cameroon, both Merfield and Powell Cotton, besides collecting primarily for the Powell Cotton Museum, also sold chimpanzee and gorilla specimens to the Royal College of Surgeons of England (Odontological Museum) and to the BM(NH), as well as to other museums and institutions around the UK<sup>2</sup>.

**Figure 7**



The shop front of Maison Tramond at 9 Rue de l'École de Médecine, Paris, as it was prior to becoming Etablissements du Dr Auzoux circa 1920 and below, the interior of the shop sometime after this.

The origins of the wild-shot animals in the Elliot Smith Collection are not precisely known, although many, if not all, were probably purchased from dealers such as Edward Gerrard & Sons in Camden Town, Rowland Ward of Piccadilly, Adam, Rouilly of Fitzroy Street, London and/or Maison Tramond in Paris (Fig. 7). Orders placed with one dealer were often supplied by another and Adam, Rouilly were closely associated with Etablissements du Dr Auzoux in Paris for 70 years passing on great ape material to, for example, the Grant Museum at UCL, The National Museum of Australian Zoology, Canberra and The Museum of Zoology, Toronto, Canada but all at later dates than the early 1920's when it is most likely the Elliot Smith Collection was already well established<sup>21</sup>. It is worth reflecting that in 1928 a fully articulated gorilla skeleton was sold by Adam, Rouilly & Co for £28.4s.0d<sup>21</sup>, equivalent to about £1,300 today. Evidence from the labels on the mounted specimens in the Elliot Smith Collection (Fig. 8) shows that some wild-shot great ape specimens in at least were indeed originally supplied by "Maison Tramond, Paris N. Rouppert successor".

**Figure 8**



An example of a label from 'Maison Tramond, successor N. Rouppert', as they were around 1920 with a label from the Elliot Smith Collection (below) affixed to the base of an articulated chimpanzee skeleton (CA13) that has at some point been painted over with black paint.

These individuals must predate 1929 when this shop was sold to Henri Barral and thereafter became Etablissements du Dr Auzoux. At the time of the sale the address book of the suppliers included some extraordinary people such as Albert Schweitzer and Pierre Teilhard de Chardin. Maison Tramond, and then subsequently Etablissements du Dr Auzoux, had developed a papier-mâché paste, later known as “Auzoux paste” for repairing and casting skeletal material. This consisted of a mixture of torn paper, flour glue, mineral filler, chopped fiber, alum as a vermicide and powdered cork<sup>22,23</sup>. It is notable that several of the mounted and articulated wild shot great apes in the Elliot Smith Collection have repairs, to what are likely damage caused by bullets and/or machettes at the time of death, to long bones and mandibles that have been made with a material that fits this description (Fig. 9).

**Figure 9**



Two fully articulated orangutan skeletons on their original wooden bases and hung from iron rods showing damage to the right ascending ramus of the mandible, left individual (CA23), and to the right proximal femur and right proximal radius of the individual on the right (CA21). Repairs have been made with a bone-coloured material resembling the papier-mâché described by Dr Auzoux.

### **Comparative anatomy teaching and dentistry**

At the same time comparative collections were starting to grow in size and number around the UK, the earliest anatomy textbooks for dental students that helped define the curriculum for the LDS RCS exam (first drafted by the Odontological Society in 1859) increasingly included comparative material<sup>24,25</sup>. A later examiner for the LDS RCS exam (from 1900-1910) and Professor of Dental Surgery at Kings College London, Arthur Swayne Underwood (1854-1916), even wrote a textbook for dental students<sup>26</sup> devoted entirely to comparative

odontology aimed specifically to illustrate the principles of natural selection and the adaptive nature of cranial and dental morphology<sup>26</sup>. Until the mid 1980s, all medical and dental students at UCL were taught (and examined in) a course in human biology, “*An introduction to the study of man*”, by the then Professor, J. Z. Young, who’s book was the set text<sup>27</sup>. For a number of these lectures, primate skeletons from the Elliot Smith Collection were used for demonstrations of comparative anatomy in the context of primate evolution. Dental students also studied comparative craniodental anatomy as part of the second BDS exam and again this collection was central to that. With the closure of UCL dental school in 1991 this all came to an end and soon after this, comparative anatomy was dropped from the dental curriculum across the UK<sup>28</sup>. Many collections no longer had a teaching role and were suddenly vulnerable. Nonetheless, the Elliot Smith Collection was always, and continues to be, a research resource and was central to many intercalated BSc, MSc, and PhD projects on comparative craniometry, radiographic imaging and dental histology. Over the years, the resulting radiographs, CT-scans, and histological sections of teeth have enhanced the usefulness of the collection. Recently, some specimens in the collection have even proved to be a viable source of trace elements, acquired from natural habitats over 100 years ago, and now successfully retrieved from the teeth of some specimens<sup>29</sup>. In the future this kind of research may enable studies of climate change, seasonality and diet in the past as well as being an invaluable source of historical primate DNA, all of which serves to illustrate the continuing value and importance of preserving our historic museum collections.

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### **Author Biography**

Christopher Dean (BDS, Dipl. Hum. Biol., DGDP RCS Eng., PhD) qualified BDS at UCL in 1975 and after a brief period as a dental officer in Camden and Islington worked as a principal in general dental practice, first full time and then part time until 2003. In parallel he studied human biology for a year in Oxford in 1976/77 and then completed a PhD on the comparative anatomy of the hominoid cranial base at The Middlesex Hospital Medical School in 1983. In 1985 he was appointed Wellcome Trust Lecturer in the Department of Anatomy, now Cell and Developmental Biology, at UCL where he first taught dental histology and then anatomy to dental, medical and science students. He was promoted to Reader in 1990 and then Professor of Anatomy in 1996. He is currently part time at The Natural History Museum, London, and is an emeritus professor at UCL. He has published extensively on comparative primate anatomy and dental histology and in 1990 with Prof. Leslie Aiello wrote "*An introduction to human evolutionary anatomy*", Academic Press.

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**Table 1.** The primate specimens in the Elliot Smith Collection

Genus	Adult M	Adult F	Adult U	Subadult	Juvenile	Infant	total
<i>Gorilla</i>	7	3	2	1	3	3	19
<i>Pan</i>	2	3	3	1	2	3	14
<i>Pongo</i>	2	4	1	2	6	3	18
<i>Hylobates</i>		2	1	1			4
<i>Papio</i>			3	1	3		7
<i>Mandrillus</i>	2						2
<i>Cercopithecus</i>	1	1	13	6	17	6	44
<i>Cercocebus</i>				1			1
<i>Macaca</i>		1			2		3
<i>Colobus</i>			1		1		2
<i>Galago</i>			3				3
<i>Lemur</i>			7				7
<i>Loris</i>		1					1
<i>Indris</i>			1				1
<i>Tarsius</i>			1				1
<i>Alouatta</i>			1				1
<i>Ateles</i>					1		1
<i>Cebus</i>				1			1
<i>Callithrix</i>			1		1		2
<i>Callicebus</i>				1			1
<i>Chiropotes</i>			1				1
<i>Lenotideus</i>				1			1
Grand total							135