Plenary I: Visual Testimony: Images and discipline-building at the Society of Antiquaries of London, Stephanie Moser, Southampton and Christian Hoggard, Aarhus

The introduction of images as a critical component in antiquarian debate is closely linked to the formation of learned societies, where the promotion of carefully produced illustrations of artefacts played a central part in designating the study of antiquities as an observational science. In this presentation we consider the role of the Society of Antiquaries of London in developing traditions of illustration that served to verify and authenticate knowledge claims. Formally established in 1717, the Society produced drawings for their meetings and appointed dedicated draughtsmen and engravers to illustrate antiquities with a view to publication. The investment in producing high-quality engravings of antiquities for publications such as Vetusta Monumenta, and the preparation of standardised illustrations for the first archaeological journal in Britain Archaeologia, was of enormous significance for the establishment of archaeology as a scientific discipline. The images generated by the Society represented an important intermediary between the informer and informed, serving to shape collective disciplinary knowledge. Ultimately, the images that were created to provide an accurate visual record of antiquities brought to the attention of the Society, became crucial visual testimony that were enlisted to advance knowledge of the past.

Plenary II: Sloane's Antiquities: providing a 'body of history' through beads, bottles, brasses and busts, Kim Sloan, British Museum

Sir Hans Sloane, Secretary and then President of the Royal Society, presented the Antiquaries with the bronze lamp which became the symbol of their society and provided its motto, 'The lamp of knowledge will not be extinguished' - but he was never a fellow. Sloane's collection included over 2000 antiquities including bronzes, marbles, Etruscan and Roman earthen wares, seals, cameos, intaglios, amulets and rings and 'miscellaneous antiquities'. They are listed under these headings in his own manuscript catalogues of his collections which are currently the subject of a research project to digitize them in order to understand their intellectual structure and how they helped to produce new knowledge and the development of modern disciplines. The surviving objects have been studied and published by modern scholars, specialists in their particular fields from the curatorial departments in which they are now scattered (Greece and Rome, Britain and Europe, Egypt, Americas and Asia) in the collection of essays edited by Arthur MacGregor in 1994. We therefore know these objects from the perspective of the modern disciplines in which they are now studied; but in this paper, I would like to explore how Sloane and his contemporaries from whom he acquired them, fellows from both societies and from Europe, understood, described and categorized them. Thanks to the project, we can even glimpse how they were arranged in Sloane's cabinets and thus how antiquities were used by 'the scholarly society' to understand, and sometimes misunderstand, the past.

Papers (in alphabetical order of surname)

1.'The Antiquity, Excellence, and Use of Musick'. Ancient Greek music and its reception in late seventeenth-century Oxford

Dr Philip Beeley, Oxford

The Oxford mathematician John Wallis (1616-1703) displayed a strong interest in the theory of music throughout his professional career, developing his ideas on the basis of his extensive knowledge of the writings of ancient Greek authors such as Euclid of Alexandria and Claudius Ptolemy on the principles of harmony and the theory of proportion. In 1682, he produced the editio princeps of Ptolemy's *Harmonics*, and in the third volume of his *Opera mathematica*, published in 1699, he complemented this text by two further editiones principes, namely of Porphyry's commentary on Ptolemy and Manuel Bryennius's tract on harmonics.

When Wallis's Oxford colleague, the Anglo-Saxon scholar Humfrey Wanley obtained a manuscript of ancient Greek choral music that had found its way to England following the recapture of Buda by Imperial forces in 1686, he naturally sought the Savilian professor's opinion on its content. Wallis duly obliged, giving a detailed appraisal and pointing out the unique nature of the manuscript as a source of information on the practice of ancient Greek music. In view of its evident significance, Wanley sought the opinions of others, too, including the Cambridge scholars John Covell and Thomas Gale, as well as Arthur Charlett, the master of University College, on whose invitation he had moved to that college soon after his arrival at Oxford in 1695. For a time, the insights the manuscript provided were an important topic of scholarly discourse.

The paper will take a closer look at the impact of the Buda manuscript on contemporary discussion of the theory and practice of ancient music, narrating and analysing an intriguing and at times rather complex story. It will show also how that discussion in turn informed proposals to reform the instruction of music at the University of Oxford shortly after the turn of the century.

2. The 1901 excavation of Stonehenge and its connection to Antiquarian research in Late 19th Century Japan

Luke Edgington-Brown, University of East Anglia

In 1901 William Gowland conducted the first scientific excavation of Stonehenge for the Society of Antiquaries of London. This paper will explore the excavation and surrounding events showing how it employed a combination of influence from British, but also Japanese antiquarianism resulting in what can be argued to be the first modern excavation in the history of British archaeological fieldwork at the dawn of the 20th Century.

Gowland sort to use the most advanced techniques available due to the significant public and academic attention surrounding the event. As such, he incorporated novel excavation methods adapted from his previous work in Japan during the Meiji period

(1868-1912) between 1874 and 1889. As a member of the Asiatic Society of Japan, he researched the tombs of the Kofun period (250-710AD) and the origin of the Japanese which also resulted in his excavation of the 7th-Century passage tomb Shibayama kofun, Osaka. The British Museum now holds his collection from Japan.

The significance of these excavations is often overlooked. However, they offer a unique example of early public archaeology, and the interconnections of several societies and scholars between Britain and Japan including William Petrie, Machida Hisanari, Charles Read, Tsuboi Shōgorō, William Pengelly, and Pitt Rivers.

3. Weak ties, Big Science. Challenges to 'blended learning' in early academic collections

Professor Dr Dominik Collet, University of Oslo

Early museums are undergoing a radical reassessment. Once regarded as hermetic assemblages enjoyed by a narrow circle of expert connoisseurs, they are now cast as crucial 'contact zones' — a reinterpretation that has reverberated powerfully with many modern institutions. Academic collections have received particular attention. They are increasingly understood as important hubs of early modern 'Big Science' - natural history, geography or archeology — that required numerous people working collaboratively across large spatial and social distances. These collections are often credited with early techniques of 'blended learning', fusing book-bound and object-led modes of collaborative inquiry, while their exhibits are recast as 'boundary objects' that stimulate exchange across disciplinary, religious, and national divides. This paper will test these assumptions drawing on British and German examples of the 17th and 18th centuries. It will highlight the polyvalence of these scholarly spaces and draw attention to the challenges of establishing facts through the 'weak ties' characteristic of early global collecting'.

4. Antiquarian Science and Scientific Antiquarianism at the Spalding Gentlemen's Society, 1710-1755

Dr Dustin M. Frazier Wood, University of Roehampton

In 1710 Maurice Johnson II (1688-1755), a Lincolnshire lawyer and polymath, returned to the Fenland town of Spalding after five years spent training at the Inns of Court and participating in antiquarian and scientific discussions in London's taverns and coffeehouses. In that year he founded the Spalding Gentlemen's Society (SGS), now Britain's oldest provincial intellectual society. In contrast to the increasing specialization of the Society of Antiquaries (SAL) and Royal Society (RS), Johnson's SGS retained a universalist approach to knowledge creation and dissemination. It recruited members from both London societies and their cognates in Europe, and introduced SGS members to those societies.

Among the most important results of this universalism was the cross-fertilization of scientific and antiquarian approaches, particularly apparent in the influence of

scientific methodologies on SGS members' antiquarian studies, which were in turn shared with the RS and SAL. This paper will explore the formal and informal links between the SGS with the London societies, and the techniques of documentation (numerical, visual and textual) and experimentation (empirical and literary) that characterized the SGS's modes of antiquarian knowledge creation. The paper will draw on the SGS's surviving collections of books, manuscripts, prints, drawings, specimens and artefacts, and their parallels in the collections of the SAL, to highlight the ways in which scientific antiquarianism was shaped not only in London but between members of scholarly communities in Britain and abroad.

5. Tito Livio Burattini, a Seventeenth Century Engineer and Egyptologist Professor Chantal Grell, Université de Versailles

Burattini (1617-1681) met John Greaves in Egypt where he stayed during the years 1637-1641. In 1675, he published the *Misura Universale* proposing a decimal universal system, where he remembers their collaboration and the measurements they performed in the pyramids. In the meantime Burattini had moved to Poland where he became royal architect, manager of mines and master of the Mint as well as a diplomat. In his free time, he was also constructing a 'flying drake', polishing lenses and imagining long astronomical tubes. About his travels in Egypt, some information is still extant today: Greaves mentions him in his *Pyramidographia* (1646), Kircher uses his descriptions and drawings of obelisks and funeral rooms (*Œdipus Ægyptiacus*, 1652-1655); Cureau de la Chambre has published a lengthy letter concerning the flood of the Nile (1665). As a matter of fact, Greaves deeply influenced the young Venitian adventurer interested in measurement and considering the Egyptians as the earliest masters of this art. Both scholars initiated a new approach of antique monuments based on observation and measure.

Burattini (1617-1681) a rencontré John Greaves en Egypte durant son séjour en Egypte (1637-1641). En 1675, dans la Misura universale (où il élabore un système métrique décimal et universel), il revient sur cette rencontre et sur les mesures réalisées dans les pyramides. Entre temps, Burattini s'est installé en Pologne où, protégé du roi et nommé architecte royal, il a dirigé des mines mais aussi des hôtels de Monnaie, et réalisé d'importantes missions diplomatiques. Dans les loisirs d'une vie très remplie, il a construit un Dragon volant, réalisé des recherches en optique, taillé des lentilles et construit des lunettes pour observer le ciel. Il reste certains témoignages de son voyage en Egypte: Greaves le mentionne dans sa Pyramidographia (1646), le père Kircher fait état de ses descriptions des obélisques et des chambres mortuaires (Œdipus Ægyptiacus, 1652-1655); Cureau de la Chambre a publié une longue lettre relative aux crues du Nil (1665). Il est frappant de constater la profonde influence Greaves sur le jeune aventurier d'origine vénitienne, converti au goût de la mesure, au point de présenter les Egyptiens comme les premiers maîtres cet art. Hommes de science, ils ont proposé une nouvelle approche des monuments antiques fondée sur l'observation and measure.

6. Winckelmann, the Descrizione della Villa dell'Em Alessandro Albani and the Society of Antiquaries of London

Dr Clare Hornsby, British School at Rome

In the 1750s and 1760s the Society of Antiquaries of London enrolled many notable Honorary Fellows, the majority of whom were based in Italy, specifically in Rome: Piranesi, Cardinal Albani and also Winckelmann who was elected in 1761. This wide fellowship created a "virtual" academy between Britain and the Continent based around antiquarian scholarship—in rivalry with the Royal Society and in contrast to the Society of Dilettanti .

In this paper I will discuss an unpublished document in the archives of the Society that provides valuable insights into Winckelmann's project to describe the antiquities collections at Villa Albani. This project remained incomplete but both its art historical and descriptive aspects were absorbed by and subsequently expressed in his great works the *Geschichte* and the *Monumenti Antichi*. The document, an English translation from German by Winckelmann's friend Heinrich Muzell Stosch, appears to have been offered to the Society after his election as Honorary Fellow , in the manner of an academic reception piece. His desire to publish in English shows the anglophile tendencies of the "Albani set" in Rome, influenced by the impact of the presence of British Grand Tourists and their unquenchable desire to acquire—and acquire knowledge of— antiquities .

7. The Ottoman History of Letters

Professor Vera Keller, University of Oregon

For Georg Hieronymus Welsch (1624-1677) of Augsburg, who had studied Turkish, Arabic and Persian, with correspondents in Aleppo and elsewhere, the Republic of Letters stretched beyond the Latin realm, as he made clear in his *Historia Literaria Turcarum*. The manuscript is lost, but Matthias Friedrich Beck (1649-1701) published a summary of its contents, inspiring many responses within the history of letters. This genre, often misunderstood as a mere compilation, in fact critically explored learned practices and institutions. Welsch's work and its reception showed that, pace Noel Malcolm, European views of Ottoman learning were not only that of a "nonintellectual, non literary culture," only of interest for the classical past it preserved. This paper explores another unpublished, but extant, manuscript responding to Welsch's work by Johann Matthäus Faber (1626-1702). It discusses the Ottoman media (calligraphy, seals, amulets, etc) that Faber and Welsch had explored together.

8. Following Footsteps: Linnaeus in Lapland Dr Staffan Müller-Wille, University of Exeter

In the summer of 1732, the Swedish botanist and physician Carl Linnaeus journeyed through Lapland. His travel account is not only often cited as the earliest first-hand account of Lapland by a naturalist and ethnographer, but also known as a founding

piece of Swedish literature. With its lively first-person narrative, keen eye for empirical detail and animated portrayal of rural and nomadic life, it gives the (intended) impression of entering a new world. Yet, Linnaeus was far from being the first to report from Lapland. Travelers from the South had reached the North long before Linnaeus, and Northerners had likewise long been travelling to the South. Ever since Sweden's first royal antiquarian Johan Bure (1568–1652), scholarly interest in Lapland had been intense, culminating in Olaus Rudbeck the Elder's (1630–1702) gothicist appropriation of the region and its cultural artefacts and traditions. There also was a longstanding tradition of students from the North defending "historical" dissertations on their respective hometown and its hinterlands at Uppsala, and one of Linnaeus's teachers, Olaus Rudbeck the Younger (1660–1740) had himself undertaken extensive travels through Lapland in 1695. I will show how Linnaeus used these sources to prepare his own journey by seeking up sights and antiquities that were already familiar from this literature. A very close reading of the journal reveals in addition that Linnaeus was rarely on his own, and mostly on a guided tour. The sights and facts that locals point to in order to impress and surprise visitors, I will argue, constitute a cultural repertoire of astonishing historical durability that formed a kind of infrastructure for scholarly travel to navigate the delicate boundaries between the known and unknown.

9. The Features of Early Modern English Antiquarian Metrology **Dr Cesare Pastorino, Technische Universität, Berlin**

The early modern period saw a widespread interest in the study of ancient weights and measures. As for instance Zur Shalev has commented, the list of authors who published on historical metrology "could amount to an introduction to early modern scholarship" (Shalev 2002). The study and precise determination of ancient measures indeed absorbed antiquarians interested in the historical reconstruction of classical, biblical or Near Eastern cultures. However, it was also informed by present-day concerns. Johann Caspar Eisenschmid, a French mathematician and cartographer from Strasbourg of the second half of the seventeenth-century, summarized well the goals of metrologists and stressed the importance of the precise knowledge of ancient measures for "theologians, lawyers, physicians, and those who study the ancient texts of philosophers, historians, poets, and especially geographers, architects and writers of agriculture." (Eisenschmid, 1708). Eisenschmid was referring to a tradition of treatises De mensuris et ponderibus, usually identified with important figures from continental Europe, like Guillaume Budé, Georg Agricola, or Juan Bautista Villalpando. In this paper, I will instead concentrate on early modern English authors, like Edward Brerewood, John Greaves and Edward Bernard, and investigate the focus of early modern English antiquarian studies of ancient weights and measures.

Eisenschmid, J. C. (1708). *De ponderibus et mensuris...De valore pecuniae veteris*. Shalev, Z. (2002). "Measurer of All Things: John Greaves (1602-1652), the Great Pyramid, and Early Modern Metrology." *Journal of the History of Ideas* 63 (4): 555–75.

10. The First Egyptian Society

Professor Anna Marie Roos, University of Lincoln

The Egyptian Society, the first of its kind, was created for the purpose of 'promoting and preserving Egyptian and other antient learning'. Extant for two years (1741-1743), its antiquarian members either travelled to the Land of the Pharaohs as part of their Grand Tour, or were simply interested in Egypt's material, linguistic or hermetic connections to current problems in intellectual history and theology. the Egyptian Society has also understudied, often dismissed by historians as only promoting traditional humanist philology, linguistics and textual criticism in the context of its Egyptian studies, or as a exemplar of Georgian sociability, a drinking club akin to the Dilettanti or the Divan Club. However, a detailed analysis of the minute book, as well as its associated contextual sources, shows to the contrary that the Egyptian Society was more than a travellers association, a social club or one dedicated to tried and true historical analysis. Rather, Source material evinces an approach in the Egyptian Society to textual sources and artefacts that characterised early modern antiquarianism and the development of early archaeology, one that also had a close relationship with the methodology of natural philosophers.

11. From collection to publication: Joseph Banks, Thomas Pennant and defining natural history and antiquarianism in late eighteenth century Britain Mr Edwin Rose, University of Cambridge

The practices of natural history and antiquarianism were intrinsically interlinked by the late eighteenth century, both in terms of collecting and publishing research. Natural history objects were often collected at the same time as ethnographic and antiquarian artefacts, descriptions and images of which were subsequently published. This paper examines the cases of two of the most prominent naturalists of the late eighteenth century, Joseph Banks (1743–1820) and Thomas Pennant (1726–98). These individuals had extensive interests in natural history and antiquarianism, although they treated these groupings of objects in very different ways. In this talk, I examine the contrast between the treatment of natural history antiquarian/ethnographic objects, both in terms of their physical arrangement in a museum collection and their placement in publications. These became evermore divided towards the end of the eighteenth century, and particularly when it came to natural history following the establishment of Linnaean systematics in Britain during the 1760s. This resulted in the emergence of new methods of managing collections and constructing publications, facilitating the emergence of evermore prominent disciplinary divisions.

12. Volcanoes and Vases: Naturalists, Antiquaries, and the mobilisation of images **Professor Martin Rudwick, University of Cambridge**

I invert the title of Ian Jenkins' and Kim Sloan's magnificent 1996 British Museum exhibition on Sir William Hamilton, in order to use the natural-scientific side of

Hamilton's dual scholarly distinction to highlight the commonalities between naturalists and antiquaries in the early-modern era, in relation to their practices of fieldwork and collecting, travel and debate. I emphasise how much the practical activities of naturalists had in common with those of antiquaries, as reflected not least in their location - except in the anglophone world - within unified 'academies of sciences' (in the plural). I use Shapin's concept of 'virtual witnessing' and Hineline's notion of 'proxies' to clarify in particular the functions and uses of the whole range of visual images, ranging from pictures of specimens to panoramic landscape views. I focus my analysis on those parts of 'natural history' that were known at the time as 'mineralogy', 'geognosy' and 'physical geography' - jointly comprising the earth sciences, or 'geology' avant la lettre – because these were taken to involve travel and outdoor fieldwork as much as collecting and the indoor study of specimens. The parallels and continuities between these activities and those of antiquarianism signal the development of a unitary conception of this kind of scholarship, in which historical metaphors and analogies were deliberately transposed from Culture into Nature. In the course of the 18th century this created a growing sense that the natural world was as much a product of history as the human world, and then that the former had been vastly more extended than the latter, yet continuous with it.

13. In Search of Lost Design: The Science of Ruins in the 17th Century **Dr Alexander Wragge-Morley, NYU**

The natural philosophers at work in 17th-Century England took a keen interest in antiquarian matters. Until recently, scholars tended to argue that members of the Royal Society of London - such as John Aubrey and Robert Hooke - mobilised the empiricism so characteristic of their scientific method to initiate the long process of transforming scholarly antiquarianism into modern archaeology. In this talk, by contrast, I will seek to show that the antiquarianism and natural philosophy were informed by a shared preoccupation that is far harder to reconcile with our image of the emergence of the modern empirical sciences: the desire to uncover design from the ruins of formerly perfect objects.

Drawing on a range of debates about the interpretation of ruins, from the battered vestiges of Stonehenge to the imperfect ruins of half-thawed snowflakes, I will show how the search for lost design can transform our understanding of the links between antiquarianism and natural philosophy in the 17th century. Hooke and his contemporaries did not simply mobilise scientific practices in order to better understand the objects of antiquarian study. Sometimes, they understood both as exercises in recovering the intentions of human-like designers from the ruins of what they had created. Acknowledging this desire to decode ruins, moreover, enables us to grasp the hitherto elusive role of design - understood both as a theological argument and a set of interpretive practices - in 17th-century natural philosophy.

14. Elf-Arrows and Origins: Antiquarian Collections and Human Descent **Dr Elizabeth Yale, University of Iowa**

In *Descent of Man* (1871), Charles Darwin took the global similarities within certain classes of archaeological artifacts as evidence of a diverse human species' unified common origin: "stone arrow-heads, brought from the most distant parts of the world, and manufactured at the most remote periods, are almost identical; and this fact can only be accounted for by the various races having similar inventive or mental powers." Such material (and implied mental) similarities helped underwrite ethnological analogies between the prehistoric peoples of Europe's past and the colonized peoples of the British Empire's nineteenth-century present, such as the "Fuegians," (which could refer to one of a number of different groups, including the Yahgan people, living at the southern tip of South America) or the Aboriginal Tasmanians, whom white settlers had driven to extinction by the time of *Descent of Man's* publication. These analogies, of course, were founded on European ethnologists' and anthropologists' deeply hierarchical and paternalistic views of colonized peoples in relation to themselves.

Despite shifts in the intellectual and political landscape--for one, in the nineteenth century, Darwin needed to make positive arguments for the unity of the human species--elements of Darwin's argument can be identified in the writings of seventeenth-century antiquaries, who made similar comparisons between flint arrow heads found in (for example) Scotland, where locals reportedly believed they were "elf-arrows," shot from the sky by fairies, and New England. Yet according to nineteenth century anthropologists, archaeologists, and ethnologists, their sciences were supposed to be making great strides beyond an unscientific, unsystematic antiquarian studies. In this paper, using Darwin's arrow heads as an entry point, I explore how arguments about human origins do (and don't) respond to changing ways of gathering, ordering, and depicting collections of objects.