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P. Fontes da Costa

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THE CULTURE OF CURIOSITY AT THE ROYAL SOCIETY IN THE FIRST HALF OF THE EIGHTEENTH CENTURY

by

P. Fontes da Costa

Unit of History and Philosophy of Science, New University of Lisbon, Quinta da Torre, 2829 Monte da Caparica, Portugal

Summary

This paper is concerned with the reporting and display of curiosities of nature at the meetings of The Royal Society during the first half of the eighteenth century. It is argued that these activities cannot, as some historians have maintained, be viewed as a mere opportunity for the entertainment of the Fellows. Instead, the reports and exhibitions fulfilled multiple roles, including the promotion of inquiry, education, polite discourse, as well as entertainment, aspects that were intimately connected during that period. Some of the individual and collective interests involved in the reporting and display of curiosities of nature at the Society are also discussed. It is argued that these interests should be considered within the broad context of the culture of curiosity at The Royal Society in this period.

Introduction

Throughout its history, curiosity has had several meanings and an often ambivalent value.[1] For many centuries, Christian thinkers regarded it as a source of danger for the soul and, as such, the object of extreme distrust. St Augustine, for example, suspected it of moving philosophers away from faith by encouraging them to commerce with devils, thus preventing the redemption of their soul.[2] Curiosity has also retained a long and predominantly negative association with the childish and the feminine.[3] In his *Enquiry* (1757), Edmund Burke describes it as 'the first and the simplest emotion' and curiosity is primordially associated with a childish, superficial and indiscriminate desire for novelties.[4] During the eighteenth century, curiosity became closely linked to commerce and luxury.[5] The desire for novelties was understood as a stimulus to trade, and objects of curiosity were treated as luxury items. The commercial society that produced such items was often perceived as morally ambiguous and this affected the evaluation of curiosity. In Britain, authors such as David Hume and Adam Smith were at the forefront of utilitarian attempts to dissociate luxury from this negative connotation and to view it positively as an element of a civilized society.[6] However, a negative, moralistic understanding of

luxury continued to have an important role in both 'learned' and 'popular' literature and this had a both negative and enduring influence in the appraisal of curiosity.

In contrast, a more widespread view defended curiosity as a passion for inquiry, and in particular a desire to learn more about rare, new or remarkable things.[7] The association of curiosity with the pursuit of knowledge did not, however, necessarily secure it an unproblematic status. One of the main problems was that the borderline between what was considered licit and illicit knowledge was not always clear and changed with different periods and contexts. Hence, as Krzysztof Pomian has remarked, one of the crucial issues was the need to control and manage curiosity within well-defined limits.[8] It is within the institutional boundaries of The Royal Society of London during the first half of the eighteenth century that the meanings and value of curiosity will be analysed in this paper.

The notion of curiosity pervaded the language used by the Fellows and correspondents of The Royal Society during this period. Not only extraordinary medical and surgical occurrences, but also unusual astronomical observations and the observation of ancient inscriptions were often described as curious in the communications presented to the Society. Reports or exhibitions of experiments, instruments and mechanical inventions were sometimes referred to as being curious as well. The certificates of election presented to the Society also illustrate this 'language of curiosity'. The certificate of the physician John Huxham, for example, stated that he was the 'author of Several curious Observations communicated to the Royal Society'. Likewise, the certificate for the election of Henry Stevens described him as 'a gentleman of extensive curiosity'.[9]

In general, being curious was considered a praiseworthy attribute of the Fellows, and the pursuit of curiosities was seen as a valuable endeavour for The Royal Society. For example, in one of his first letters to the Society from Italy, Sir Thomas Dereham asserted his intentions of furnishing the Society 'with all the curiosities [he could] get for them, and in time to make greater acquisitions if [he] may rely upon the promises that from several parts had been made to [him].'[10] The language of curiosity was often used in the context of travel. Often, Fellows and correspondents sent letters from abroad reporting monstrous births together with other singularities of nature. In a letter to Dr Edward Tyson, the Revd Charles Ellis mentions not only the 'Account of a young Lady, born Deaf and Dumb, taught to Speak' but also 'the Physick Garden at Amsterdam, the Chamber of Rarities at Bohn, a Monstrous Birth, the Quarry at Maestricht, Fr. Linus's Dyals at Liège, the Cachot or Rooms cut in the Rock of the Castle in Namur, Sir Jo. Mandevil's Tomb at Leige [and] the Frieland Boy with Letters in his Eye.'[11] The assemblage of these various rarities in a report of just three pages resembles catalogues of cabinets of curiosities of the period.[12] Furthermore, the letters read at the meetings often mentioned accounts of various cabinets of curiosities in Europe such as the Museum Collegii Romani, the King of Poland's collection of rarities, the cabinet of curiosities of Mr Diasquet and the cabinet of curiosities of Mr Jobais in Leyden.[13]

The clearest manifestation of the practice of curiosity at The Royal Society was the regular exhibition of natural and artificial curiosities at the meetings. The

exhibition of specimens often accompanied the reading of reports of monstrous births and other extraordinary phenomena at the meetings. When, for example, the surgeon Claude Amyand presented an account of a female monkey with an unusual structure of the generative parts to the Society, he also showed the dissection of the specimen.[14] On several occasions only the specimen was displayed. At one of the meetings, the Revd William Derham showed a specimen of 'the monstrous face of a Child' who had been born recently near his livings in Essex.[15] Also, visual representations were often presented in cases where it was impossible to provide the specimen.

The promotion of the practice of curiosity also showed itself in the fact that for a long period The Royal Society maintained its own collection of rarities and other specimens, usually referred to as the Repository.[16] At the same time, several of the members of the Society maintained their own collections of natural and artificial curiosities. Hans Sloane's unique and celebrated collection formed the basis for the creation of the British Museum, opened in January 1759.[17] The collections of John Woodward, Martin Lister and Ralph Thoresby also gained some notoriety in the period.[18] Other members of the Society, such as James Parsons, retained private collections well into the second half of the eighteenth century.[19]

This paper examines the place of the reports and exhibitions of monstrous births and other extraordinary phenomena of nature within the general context of the culture of curiosity current at The Royal Society during the first half of the eighteenth century. The analysis is undertaken in three stages. First, it examines what characterized the curiosities of nature exhibited at the meetings and their relationship with experimental displays at the Society. Next, it analyses the success of exhibitions and reports of curiosities of nature at the Society within the context of academic and social codes of civility of the period. Finally, it discusses some of the personal and institutional interests involved in the promotion of the culture of curiosity at the Society.

Exhibition of curiosities of nature at the meetings

The ordinary meetings of the Society occurred once a week and usually lasted between one and three hours.[20] These gatherings formed the basis of the corporate activity of the members. According to the original statutes, which, with minor changes, were still in use during the second half of the eighteenth century, the activities of the Fellows at these meetings were 'to order, take account, consider, and discourse of philosophical experiments and observations; to read, to hear, and discourse upon letters, reports and other papers containing philosophical matters as also to view, and discourse upon, rarities of nature and art; and thereupon to consider, what may be deduced from them, or any of them; and how far they, or any of them, may be improved for use or discovery.'[21] The exhibition of natural and artificial curiosities, among which monstrous births were also generally considered to be included, was therefore an integral part of the matters dealt with at the meetings

of the Society. The natural curiosities displayed included monstrous specimens, different kinds of anatomical preparations, petrified specimens, concretions, figured stones, exotic animals and plants, minerals, fossils, shells and corals. Included within the artificial curiosities displayed were cloths, ornaments, utensils, curious works of art and antiquities.[22] Figures 1 and 2 depict two monstrous specimens presented by the physician James Parsons to the Society around the middle of the eighteenth century. Parsons made a considerable number of contributions on the subject of monstrous births and had a reputation as a skilled draughtsman.[23] At the beginning of his career, he had been an artist and anatomical assistant to the distinguished physician James Douglas.[24] Parsons uses a naturalistic style of representation in both illustrations, which includes the depiction of detail and the use of conventions of shadowing. This style contributed to the authentication of the illustrations by providing those who viewed them with a sense of virtual witnessing.[25]

A significant number of the specimens presented at the meetings were sent from distant and exotic countries. For example, Mr Withson exhibited two pieces of petrified wood from Sumatra, Dr Halley several inscriptions from Syria, Dr Petiver some sorts of corals and corallines from the Philippine Islands, Dr Sloane a hat from

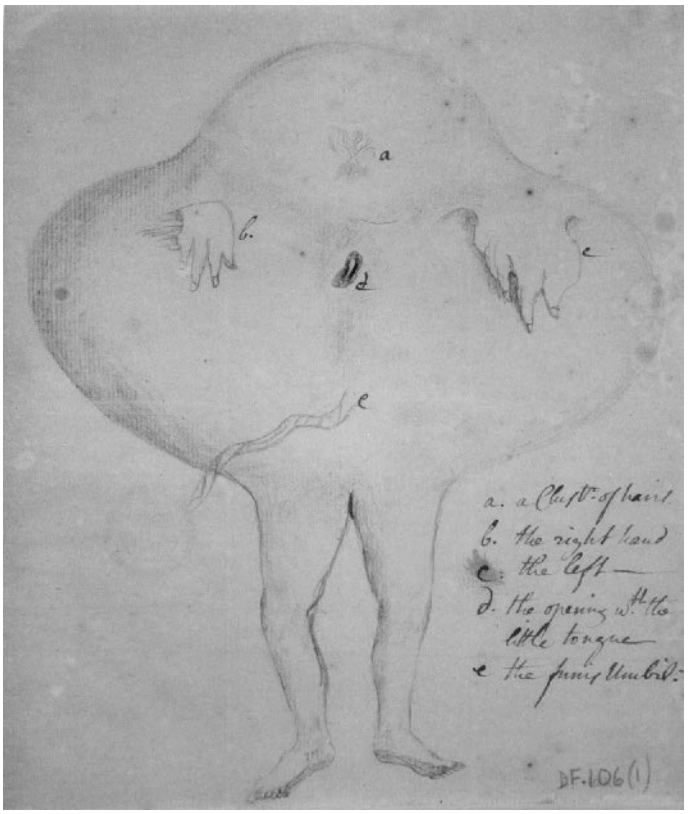

Figure 1. James Parsons, *A Monstrous Female Foetus without a Head, with a Body of a Monstrous Bulk in Proportion to its Height Presented to the Royal Society on April 24, 1740*, drawing, Hunterian Collection, DF. 106 (1). (Reproduced courtesy Glasgow University Library.)

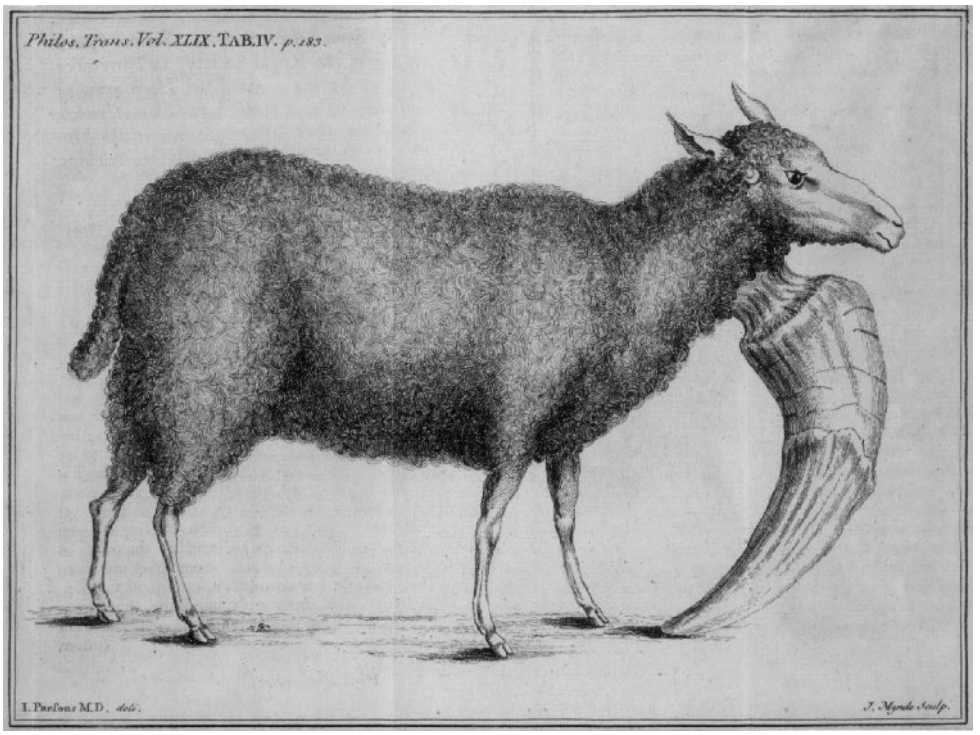

Figure 2. James Parsons, 'Sheep with a Monstrous Horn Showed Alive to the Royal Society, 1755–1756', engraving, in *Philosophical Transactions* **49**, 183–186 (1755–56).

China, Mr Haistwell a bird of paradise from the East Indies, Mr Richard Graham a large spider from the West Indies, and Lord Cavendish a large topaz from Peru.[26]

The status of a curiosity was, in some cases, due not to the intrinsic rarity of the specimen but to remarkable histories related to them. In this group were, for example, the piece of a bone that came out of a woman's throat, shown by Dr Sloane; some bones found in the human heart of a person who died of a shortness of breath, shown by Dr Tyson; a worm taken out of the guts of a black hog, shown by the Revd William Derham; and the bullet with which his father had been shot through the jaw into the mouth, shown by Lord Carpenter.[27]

Hence, most of the specimens presented at the meetings shared the exotic and/or rare attributes that recent scholarship has shown to be typical of the objects traditionally displayed in a cabinet of curiosities.[28] In a similar way, the exhibitions were not restricted to natural specimens but also included artificial curiosities.

The status of a curiosity or the rarity of the specimens was not always clear. This is particularly true of anatomical preparations of commonly observed productions of nature such as the preparations of blood vessels of the lungs in a frog, presented by the surgeon William Cowper; of a human heart, presented by Dr Douglas; of the uterus and parts of generation of a woman, presented by the surgeon William Cheselden; and of the uterus of a foetus presented by Dr Nicholls. When special techniques of injection were used to obtain anatomical preparations, their status as

curiosities was more apparent. This was due not only to their uniqueness but also to the spectacular visual effect of many of these preparations.

The natural curiosities presented at meetings therefore covered an ample spectrum of specimens. At one end were the more entertaining exhibitions such as a dog that 'pronounced several words in English, French and High Dutch and repeated all letters of the Alphabet very distinctly', presented by 'a German'.[29] At the other were the exhibitions with a more educational, research purpose, such as the anatomical preparations presented at the meetings by physicians and surgeons. These included anatomical preparations of monstrous births and other extraordinary phenomena of nature.

However, it is difficult and indeed incorrect to make a clear distinction between the entertaining and the educational or investigative aspects of these different exhibitions. First, the displays presumably had a variety of functions for the Fellows attending the meetings. Secondly, the notion of 'learned entertainment' used by the Fellows in the period supposed precisely an alliance of learning with entertainment. The satisfaction of curiosity was also not necessarily adverse to social utility, because several reports and exhibitions presented at the meetings of the Society were described as curious and useful.

The element of spectacle was particularly evident when important persons attended the meetings of The Royal Society. They were then not only entertained with the display of curiosities of nature but also with the demonstration of experiments. For example, when the ambassadors of Spain, Sicily and Venice visited the Society on 16 February 1716 they were 'entertained with an anatomical curiosity' shown by James Douglas.[30] Soon afterwards, John Theophilus Desaguliers entertained the Imperial Envoy Count Volkra with 'some of the more curious experiments'.[31] At another meeting when the Prince of Wales and the Duke of Lorraine were present, Dr Frobenius was chosen to present some experiments on phlogiston and the 'transmutation of phosphorus', and Stephen Gray to show experiments on electricity.[32] In addition, after the Prince of Modena had been elected a Fellow he 'was entertained with Gray's electrical experiments' and John Theophilus Desaguliers showed him 'his new Planetarium'.[33] The presentation of natural philosophy as public spectacle at The Royal Society was not restricted to these more formal occasions. The minutes of the Society refer to the 'entertainment of the Society' with experiments at several other meetings.

The entertainment aspect of natural philosophy was already part of the Society's earlier history. The spectacular qualities of the phenomenon of phosphorescence were often exploited at the Society's early meetings.[34] The love of the marvellous also appeared within eighteenth-century natural philosophy and was used by successful lecturers to attract their audience, especially during the earlier part of this period before this came to be viewed as a threat to social order.[35] Simon Schaffer has pointed out that the understanding of the market of natural philosophy in eighteenth-century England challenges the received distinction between superficial display and serious instruction.[36]

At least part of the electrical experiments performed at the meetings of The Royal

Society were also conceived of as demonstrations for a general audience. Several demonstration devices were presented at the meetings, such as Desaguliers's machine for explaining the tides from the joint operation of the Sun and the Moon, the celestial globe of Mr Senex [*sic*] for showing the position of 'the starry sphere', and Desaguliers's new planetarium.[37] Indeed, the machines and instruments of the Society were kept together with the collection of natural and artificial curiosities in the Repository of the Society.

The relationship between The Royal Society and the public market of natural philosophy has also been brought to light. Larry Stewart has pointed out that the Society's curators of experiments, Desaguliers and Francis Hauksbee, pioneered the presentation of lectures and experimental displays in London coffeehouses and inns.[38] Moreover, he has emphasized how entertainment had to be ensured in Desaguliers's public lectures. Desaguliers himself acknowledged the close relationship between entertainment and learning in the instruction of natural philosophy: 'a great many Persons get a considerable Knowledge of Natural Philosophy by Way of Amusement; and some are so well pleas'd with what they learn that Way, as to be induc'd to study Mathematicks, by which they at last become eminent Philosophers.'[39]

The possibilities of natural philosophy for learned entertainment with the use of magnetic instruments and experiments have also been shown.[40] Patricia Fara has pointed out that fine and exceptional lodestones were considered precious items in cabinets of curiosities, and she has emphasized the spectacular dimension of some of the magnetic displays at the Society; in particular, how Gowin Knight performed like 'a prestidigitator at the Royal Society, dramatically displaying how he could almost magically alter the polarity of pieces of loadstone, and vividly using stage props like keys and swords to demonstrate the power of his new magnets'.[41]

However, the aforementioned studies and examples do not imply that the practices of displaying natural or artificial curiosities and experiments or machines at The Royal Society in the eighteenth century necessarily complemented each other, or that they necessarily reached the same audience. Nevertheless, the salient point is that both were able to combine aspects of entertainment and education.

Curiosities of nature and sociability

At the ordinary meeting of The Royal Society on 7 January 1719, an account was read by Mr Brecknock, an apothecary from Lincolnshire, concerning a woman who had a new set of teeth at the age of 66 years. On this occasion, the President, Isaac Newton, mentioned a 'like case of his own remembrance' which had happened some years before to an aged woman near Cambridge. This was not the only occasion on which Newton intervened after the reading of this type of report. At two other meetings, he also contributed personal observations about a worm found in the head of a dog and about 'a Person who died with drinking Brandy whose Limbs remained flexible after death.'[42] Similarly, at one of the meetings Edmund Halley intervened in

a discussion about the origin of monsters through the power of the mother's imagination. He reported the case of one Mrs Colson, who, having been in great danger of receiving a kick from the heel of a horse as she passed behind him, went home and miscarried of a child that seemed bruised in the belly where the mother had apprehended the blow.[43] To what extent should we understand Newton's and Halley's contributions as a manifestation of their engaged interest in reports of extraordinary phenomena of nature? Why, in any case, were they concerned to participate actively on these different occasions?

Research into the minutes of The Royal Society during the first half of the eighteenth century shows that the reports and exhibitions of extraordinary phenomena were precisely what motivated the most interventions from the Fellows attending the meetings. It also shows that most of these interventions, like Newton's and Halley's, consisted of the recollection of identical cases. Thus, the interventions of other Fellows after the reading of such reports had an important bearing on their authentication.[44] This can be illustrated even better through Dr Stack's report concerning 'a Woman at sixty eight Years of age who had sufficient Milk in her Breasts to suckle Children'.[45] On this occasion, Hans Sloane confirmed the account by assuring the Society that 'he had the Woman brought to him and having desired her to press the Nipple, there issued out real Milk'. Another Fellow, Mr Bogdam, took the opportunity to say that 'he once saw a Man, a labourer of about forty Years of age, who had Milk in one of his Breasts that he examined himself and was satisfied there was no deceit'.[46] However, the role of these interventions in the process of authentication of extraordinary observations was not necessarily divorced from the fulfilment of other equally relevant aims for the Fellows. Another way of understanding these contributions is to consider that reports and exhibitions of extraordinary phenomena of nature enabled the exercise of civility and sociability encouraged by the Society.

The place of civility in the new societies promoting natural knowledge has attracted considerable scholarly attention.[47] Several scholars have emphasized its important role in achieving moderation in academic debate and suggested why this was a crucial goal in contrast to the disputations of university scholastics. In particular, Steven Shapin and Simon Schaffer have placed the appeal to the codes of civility regulating discourse and controversy at The Royal Society within the context of the Restoration years and they have examined it as a reaction against the dogmatism and enthusiasm of the Civil War and Interregum.[48] Lorraine Daston, on the contrary, has argued that 'there was nothing peculiarly English about the insistence upon polite and mild dealings with opponents in natural philosophy', stating that those attitudes had been expressed earlier and elsewhere.[49] Still, Daston's view does not deny the important role that a specific context like the first years of the Restoration might have had in a new amplification or readjustment of these attitudes.

In his more recent work, Shapin has further emphasized the defence of discursive moderation in the practice of natural philosophy in seventeenth-century England and its relation to gentlemanly codes of behaviour.[50] In this context, opposition and

discourse that were too precise and demanded too much accuracy in understanding or technical competence was considered to be a violation of these codes. Some recent cultural studies on 'early modern' Italian natural philosophy and natural history have called attention to the courtly and sociable aspects of these practices.[51] In particular, Paula Findlen has shown that curiosity was also a specific social attribute and that cabinets of curiosities were also '*conversable spaces*'.[52]

With the introduction of the language and discourse of 'politeness' in the late seventeenth and early eighteenth centuries, civility assumed a new form and dimension in English society.[53] Politeness was a contemporary notion of how people should behave and interact socially that enabled the distinguishing of the polite from the 'common' and 'vulgar'. Similarly, politeness was strongly associated with a particular form of conversation that favoured not only moderation but also the desire to please and be admired. Moreover, politeness involved a concept of sociability in which entertainment and instruction were intimately connected.

The Royal Society's motto, 'Nullius in verba', proclaimed its notion of the limited value of words, hypotheses and theories in the making of natural knowledge. Instead, the Society promoted the direct observation of nature and the probing of her by experiment.[54] As several historians have noted, the new concern with observations and experiments was an effective way of avoiding disputes.[55] One of the attractions of the display of curiosities of nature at the meetings resided precisely in their materiality. Moreover, in comparison with some of the experiments that were also displayed at the meetings, the exhibition of curiosities had the advantage of appealing to a more general audience, thus rendering them more suitable subjects of polite discourse at the Society. As a popular treatise on politeness stated, those that 'are fond of talking, and desire to be hear'd with pleasure, ought to seek subjects proper to regale the Curiosity of others, and always keep them in expectation'.[56] Similarly, William Winstanley's *New help to discourse* (1669) included a section entitled 'A Discourse of Wonders, Foreign and Domestick', which covered accounts of storms, earthquakes, floods, volcanoes, and a selection of the famous monsters of the day.[57]

There are also several other reasons for the suitability of reports of extraordinary phenomena for the exercise of polite discourse. First, some of these reports were accompanied by material evidence that reduced their controversial status. Secondly, most of the reports restricted themselves to a clear description of the phenomena and avoided any mention of possible explanations. This is particularly clear in the case of monstrous births, because several explanations for their origin were known to exist but were not usually discussed in the reports.[58] Thirdly, the general interest in curious and extraordinary phenomena of nature, within and outside the Society, meant that the reading of reports of extraordinary phenomena generally offered more opportunities for contributions at the meetings, even for Fellows such as Newton and Halley who were mainly interested in natural philosophy. Thus, the apparent success at the Society of the exhibition of natural curiosities and of reports of extraordinary phenomena should also be viewed in relation to the sociable dimension of these meetings. This could also explain why the reading of papers of pure mathematics was seldom attempted there.[59]

Quentin Skinner has argued that the early Royal Society should be described as 'something much more like a gentlemen's club'.[60] This interpretation has been further supported by Michael Hunter's comprehensive studies of the Society in the seventeenth century.[61] Using the words of a contemporary, he described the Society as 'a great assembly of Gentlemen'.[62] He also illustrated this view with a passage from John Evelyn in which the Society is portrayed as 'an Assembly of many honorable Gentlemen, who meete inoffensively together under his Majesty's Royal Cognizance; and to entertaine themselves ingenuously, whilst their other domestique avocations or publique business deprives them of being always in the company of learned men and that they cannot dwell forever in the Universities'.[63] Hunter's detailed studies of the early membership of the Society have shown that it 'was predominantly recruited from the professions, land and government, and was not particularly mercantile' and that 'in this it was typical of the more general leisured culture of London which filled the coffee-houses and theaters.'[64]

The history of The Royal Society in the eighteenth century has not received the same attention as the previous period. This problem was first addressed by David Miller who noted the dull image of the Society in the eighteenth century, as presented in standard survey histories. He also pointed to the concentration of recent studies on the prehistory and early history of the Society.[65] Miller's work suggests that the image of 'a gentlemen's club' is still probably the most appropriate one for describing at least some of the activities of the Society in the eighteenth century. My research on the place of curiosities of nature at the Society supports this view. The close relationship between The Royal Society and the Society of Antiquaries is, in this respect, illustrative. In a historical survey of the Society of Antiquaries published in the first volume of its official journal in 1770, the editor relates how 'every Member, or whoever was admitted to be present, brought from time to time whatever they had of their own or of their Friends that was curious, or uncommon … on which, as they were handed round the Table, each gave his opinion'.[66] There was a considerable overlap in membership of the two societies in this period, which suggests that some elements of the proceedings at the two societies were also similar.[67] Moreover, the same article informs the reader that the reason that the Society of Antiquaries 'renewed their meeting at the Mitre Tavern in Fleet-Street' in 1728 was precisely to conform 'with the desire of those Gentlemen who were also Members of the other Society, as to fix them to Thursday evening, after the Royal Society had broke up'.[68]

Finally, it should be emphasized that the opportunities for sociability and entertainment at the meetings of The Royal Society were not only sought by so-called 'amateurs'. The promotion of learned entertainment was an ideal for the majority of the Fellows. It permitted the exercise of true academic civility because it combined a social and academic function.[69] The interventions at the meetings were also an opportunity for making 'public' and ensuring the priority of observations that were then registered in the *Journal Books* of the Society.

The economy of curiosity

There were various reasons for, and interests involved in, the reporting of extraordinary phenomena of nature to The Royal Society. The motive most often presented by the author was the singularity of the observation *per se*, together with the fact that no similar cases had yet been reported to the Society.[70] In some instances, the author's stated motivation was to provide the *Philosophical Transactions* with instances comparable to those that had already appeared in the *Mémoires de l'Académie Royale des Sciences de Paris* or other periodicals.[71] Other authors, conforming to the rules of civility, offered their observations with requests for help and advice from the Fellows. For example, James Bate, a surgeon from Maryland, reported to the Society the case of the 'extraordinary metamorphosis observable in Colonel Barnes' negro Woman' so that the Fellows might communicate any 'further experiments' regarding this woman to him.[72] In this way, the emphasis on singularity or on the possibility of a collaborative enterprise was often used to enhance the potential value of the reports.[73]

The communication of reports of extraordinary phenomena of nature to The Royal Society, and especially their publication in the *Philosophical Transactions*, contributed to elevating the professional and social rank of surgeons and men-midwives whose professional and social status was below that of physicians.[74] Sometimes the author remarked how much was to be gained in terms of midwifery itself. Thus, in one of the reports published in the *Philosophical Transactions*, Starkey Myddelton remarked that 'although extra-uterine Conceptions have frequently appear'd from Cases of undoubted Authority, many of which stand now upon the Records of the Royal Society; nevertheless I have thought a Doctrine of so extraordinary a nature cannot be too strongly supported, as it is of the highest Consequence, as well in establishing the received Opinions of Conception in general; as in regulating the Judgment and Practice of those who are more particularly employed in the Business of Midwifery'.[75]

Not only surgeons and men-midwives stood to gain from the presentation of reports on monstrous births and other extraordinary phenomena. The communication to The Royal Society of a report of this type was often a good opportunity for physicians to exhibit their anatomical skills and medical knowledge. Daniel de Superville was elected a Fellow of the Society shortly after having communicated a paper with 'some Reflections on generation, and on Monsters' that is specifically mentioned in his certificate of election.[76] In a similar way, the first contribution of James Parsons to the Society, even before being elected, was an account of 'a monstrous Female Foetus without Head and with the Body of a monstrous bulk in proportion to its height' (figure 1).[77] Several months later he was elected a Fellow. Shortly afterwards he also published a dissertation on hermaphrodites, which he dedicated to the President, Council and Fellows of The Royal Society.[78]

In general, social prestige and academic recognition were sought in reporting monstrous births and other extraordinary phenomena. This was particularly evident

with reports resulting from visits abroad such as the Grand Tour in which the exercise of curiosity had an important place.[79] An example is the letter from Dr Philip Broynius with an account of what remarkable things he encountered on his journey to Italy, including a monstrous foetus preserved in spirits of wine that he saw in the Duke of Florence's Repository.[80] In addition, the Grand Tour was sometimes used by the Fellows to obtain further information about the curious specimens under their study.

In his *Diary*, John Evelyn described with consternation the fate of a medal collection, which after the death of the collector was 'thrown about the house … for children to play at counter with.'[81] In fact, one of the problems of private collections was the likelihood of their dispersal after the death of their owners. Thomas Clerk stated the advantage of donation to an institutional collection such as The Royal Society's Repository: 'that the Donors will be thereby entitled not only to have their names recorded in the Minute Books of one of the best intended Societies of Europe and that bears no inconsiderable reputation amongst all the learned World abroad, however, disregarded by some here at home: But also to meet with convenient opportunities of having their Donations carefully preserved for the Benefit and Satisfaction of Posterity'.[82]

An even more significant point was that curiosities of nature were often used as tokens in the structure of credit and reward within the community associated with The Royal Society. The minutes of the ordinary meetings show that a considerable number of natural and artificial curiosities were offered to the Society during the first half of the eighteenth century. They show that a substantial number of these were given by active members of the Society residing in London, such as Hans Sloane, John Woodward, Martin Lister, Edward Tyson and Cromwell Mortimer, some of them engaged in the activity of collecting. Their offerings presumably had a positive influence on their position within the Society. At the same time, the opportunities for displaying curiosities at the meetings seem to have also been used by some of the Fellows to advertise their own collections. This is particularly evident with Sloane, who presented at the meetings a remarkable number of specimens from his museum.[83] These exhibitions might have had a role in the notoriety that his museum acquired in the period.[84] Raymond Stearns has even suggested that some of the specimens offered to the Society found their way into the private collection of Sloane when he was president of the Society.[85]

Fellows or correspondents residing in the British colonies offered a considerable number of natural and artificial curiosities to The Royal Society. Their presents testify to the intimate connection between the commercial enterprise of overseas trade and the philosophical one of collecting foreign curiosities. As Raymond Stearns has pointed out, many Fellows were investors in, and officers of, the great English trading companies of the time, and The Royal Society itself invested funds in these companies.[86] Indeed, some of the specimens were donated by members of the East India Company and the Royal African Company.[87] Stearns has also shown that between 1663 and 1783, 53 Fellows of The Royal Society were elected from the British colonies of North America and that 20 of these were chosen primarily

because of their position as governors in these colonies.[88] In fact, the minutes of the meetings indicate that a number of governors such as Governor Collet, Governor Nicholson and Governor Burnet offered natural and artificial curiosities to the Society during the first half of the eighteenth century.[89] It is therefore not surprising that Nicholson and Burnet were rewarded with Fellowships of the Society.[90] John Winthrop, a Fellow living in New London, Connecticut, donated to the Society a collection containing 364 items.[91] This collection furnished specimens for display at several meetings during the winter of 1736.[92] The Society rewarded Winthrop by exempting him from the payment of his membership fees and dedicating the 40th volume of the *Philosophical Transactions* to him.[93]

British captains also offered some natural and artificial curiosities to The Royal Society. Capt. Goshin sent the Society a box of blue stone used to make a beautiful blue colour; Capt. Legge a precious stone in November 1739, and Capt. William Walker a 'large parcell' of natural curiosities from the Spanish Main, together with a curious piece of hydrography, being a plan of the Bay of Honduras.[94]

The donors of natural and artificial curiosities were Fellows and correspondents from various occupational and social backgrounds. They included Isaac Newton, who donated a small bird brought from Pennsylvania, and William Oliver the viper-catcher, who donated 'three female Vipers with their young and a Box of young Snakes'.[95] Moreover, some of the gifts were the result of exchanges between The Royal Society and other learned societies. For example, in 1697 William Molyneux sent to the Society an octagonal pillar taken from the Giant's Causeway in return for its offer to 'bestow on the Dublin Society such duplicates or Rarities as can be spared out of the Repository'.[96]

'Humble people' who had special permission to attend the meetings also provided specimens for exhibition at the meetings of the Society. In exchange, they usually received a sum of money: 'a Man' showed a monstrous pig, 'a Gentleman's Cook who received a crown' showed two hearts and a double liver of a chick, 'a Man who received 10 shillings' showed a monstrous calf, 'a poor Woman who was ordered a crown' showed a double kitten joined at the breast having one head and two bodies distinct and 'a Man who received two guineas' showed a boy with a preternatural conformation of the whole skin.[97] Monstrous births and other curiosities of nature also were exhibited at the Society by showmen engaged in presenting curiosities to a more general audience.[98] In return for the exhibitions at the Society, the showmen used the name of the Society in the advertisements for their shows.

Ultimately, the reports and exhibitions of monstrous births and other curiosities of nature appealed to a large audience of Fellows from a variety of social and educational backgrounds. As mentioned in the previous section, they were particularly notable for providing 'learned entertainment' to the Fellows. At the same time, the Fellows assisted the process of validation of extraordinary phenomena of nature.[99] Thus, both individual and institutional gains are crucial considerations in understanding the place of curiosities of nature at The Royal Society during this period.

Concluding remarks

This paper has revealed the importance of the reporting and display of curiosities of nature at The Royal Society during the first half of the eighteenth century. It has shown that the success of these practices was based largely on their multiple roles within the Society. They promoted not only the compilation of nature's history and medical inquiry, but also the instruction, polite discourse and entertainment of the Fellows. Moreover, they served as valuable commodities in the economy of favours associated with the Society and strengthened the authority of medical practitioners and lecturers. In addition, the authentication of curiosities of nature at the meetings offered the Society a unique opportunity to act as a corporate body. The place of curiosities of nature at The Royal Society therefore shows the variety and intricacy of elements involved in the making and diffusion of natural knowledge in the period.

Preliminary research suggests that the exhibitions of curiosities at the meetings were progressively reduced during the second half of the eighteenth century. Similarly, the collecting activities of the Society decreased and were eventually abandoned with the offer of its Repository to the British Museum in 1779. These shifts indicate that the production of knowledge became less bounded by the physical setting of the Society. The decrease in exhibitions at the meetings and in the collecting practices of its members suggests significant changes in the Society's self-image and in its concept of knowledge.

One of the implications of this is that the documentation of nature in all its forms and manifestations seems to have become a less important function for the Society during the second half of the eighteenth century. Correspondingly, more stringent and sceptical attitudes in the assessment of knowledge become critical to the Society's self-image and its public reputation. These changes probably contributed to the redefinition of what counted as knowledge at the Society. They also suggest a significant decline in the role of The Royal Society as a place for sociability, and that the practice of learned curiosity moved to other institutions such as the Linnean Society of London.[100]

Notes

1 Some relevant contributions on the history of curiosity include K. Pomian, *Collectors and curiosities: Paris and Venice, 1500–1800* (Polity Press, Cambridge, 1994); N. Thomas, 'Licensed curiosity: Cook's Pacific voyages', in *The cultures of collecting* (ed. J. Elsner and R. Cardinal), pp. 116–136 (Reaktion Books, London, 1994); K. Whitaker, 'The culture of curiosity', in *Cultures of natural history* (ed. N. Jardine, J. Secord and E. Spary), pp. 75–90 (Cambridge University Press, 1996); L. Daston and K. Park, *Wonders and the order of nature, 1150–1750*, especially chapter 8 (Zone Books, New York, 1998).

2 K. Pomian, *op. cit.* (note 1), p. 59.

3 N. Thomas, *op. cit.* (note 1), pp. 123–124.

4 E. Burke, *A philosophical enquiry into the origin of our ideas of the sublime and beautiful* [1757], p. 21. (Basil Blackwell, Oxford, 1987).

5 See N. McKendrick, 'The comsumer revolution of eighteenth-century England', in *The birth of a consumer society: the commercialization of eighteenth-century England* (ed.

N. McKendrick, J. Brewer and J.H. Plum), pp. 9–33 (Europa Publications, London, 1982); J. Brewer, '"The most polite age and the most vicious": attitudes towards culture as a commodity, 1660–1800', in *The consumption of culture, 1600–1800: image, object, text* (ed. A. Bermingham and J. Brewer), pp. 341–361 (Routledge, London, 1995).

6 C. Berry, *The idea of luxury: a conceptual and historical investigation*, chapter 6 (Cambridge University Press, 1994).

7 In his *Dictionary of the English language* (1755), Samuel Johnson defines 'curiosity' as 'inquisitiveness; inclination to inquiry' and to be 'curious' as to be 'inquisitive; desirous of information; addicted to enquiry'.

8 K. Pomian, *op. cit.* (note 1), p. 62.

9 The Royal Society's *Certificates of election*, Jan. 18, 1739; *ibid.*, March 20, 1740.

10 The letter was dated Florence, March 5, 1723, Royal Society's *Manuscript Letters*, D. 2. 15.

11 C. Ellis, 'An Account of a Young Lady Born Deaf and Dumb, Thought to Speak. That Costerus First Invented Printing, Anno 1430. Of the Physick Garden at Amsterdam, and the Chamber of Rarities at Boln [Sic.]. Of a Monstrous Birth. Of the Quarry at Maestricht. Fr. Linus's Dyals at Leige. The Cachot or Rooms cut in the Rock of the Castle in Namur. Sir Jo. Mandevill's Tomb at Leige. The Friesland Boy with Letters in his Eye', *Phil. Trans. R. Soc. Lond.* **23**, 1416–1418 (1702–03).

12 See, for example, R. Thoresby, *Museum Thoresbyanum* (London, 1713); R. Greene, *A particular and descriptive catalogue of the natural, and artificial rarities in the Lichfield Museum* (Lichfield, 1786); and D. Boneter, *Museum Boulterianum, A Catalogue of the Curious and Valuable Collection of Natural and Artificial Curiosities in the Extensive Museum of Daniel Boulter, Yarmouth* (London, 1794).

13 The Royal Society's *Journal Books*, Dec. 13, 1710; *ibid.*, May, 25, 1727; *ibid.*, June 16, 1703; *ibid.*, Nov. 21, 1734.

14 *Ibid.* (note 13), Nov. 23, 1738.

15 *Ibid.* (note 13), March 20, 1712.

16 'Repository' was the Society's standard term for referring to its collection, and 'Museum' was used as the Latin equivalent of this. On the history of the Repository see M. Hunter, 'The cabinet institutionalized: the Royal Society's "Repository" and its backgound', in *The origins of museums: the cabinet of curiosities in sixteenth and seventeenth-century Europe* (ed. O. Impey and A. Macgregor), pp. 159–168 (Clarendon Press, Oxford, 1985); and *idem*, 'Between cabinet of curiosities and research collection: the history of the Royal Society's Repository', in *Establishing the new science: the experience of the early Royal Society*, pp. 123–244 (The Boydell Press, Woodbridge, 1989).

17 See G.R. De Beer, *Sir Hans Sloane and the British Museum* (Oxford University Press, New York, 1953); and M. Caygill, 'Sloane's will and the establishment of the British Museum', in *Sir Hans Sloane, collector, scientist, antiquary* (ed. A. MacGregor), pp. 45–68 (British Museum Press and Alistair McAlpine, London, 1994).

18 On English cabinets of curiosities, see A. MacGregor, 'The cabinet of curiosities in seventeenth-century Britain', in *The origins of museums: the cabinet of curiosities in sixteenth and seventeenth-century Europe* (ed. O. Impey and A. Macgregor), pp. 147–158 (Clarendon Press, Oxford, 1985); and K.R. Arnold, *Cabinets for the curious: practising science in early modern English museums*, unpublished PhD dissertation (Princeton University, 1992). J.M. Chalmers-Hunt (ed.), *Natural history auctions 1700–1792: a register of sales in the British Isles*, pp. 57–67 (Sotheby Parke Bernet, London, 1976) lists 133 natural history auctions between 1710 and 1800 in Britain. This register shows a great diversity of collectors, from surgeons, apothecaries and medical doctors to painters, antiquarians, dealers, 'ladies', 'gentlemen' and 'persons of distinction'.

19 *A Catalogue of the Collection of Natural History, some Antiquities, Books, Prints, Books of Prints, Anatomical and other Drawings of the Learned and Ingenious James Parsons* (London, 1792).

20 An intermission of two or three weeks was usually taken at Christmas and again at Easter, and usually the Society held a long recess from early July until October. See *The Record of the Royal Society of London for the Promotion of Natural Knowledge*, 4th edn (The Royal Society, London, 1940).

21 *Op. cit.* (note 20), p. 289. The original statutes were enacted in 1663. During the next 90 years changes were made from time to time in the statutes but a new version was only drawn up in the year 1752. See *Diplomata et statuta Regalis Societatis* (1st edn, London, 1663; 2nd edn, London, 1752). An abstract of the original statutes is also included in T. Sprat's *History of the Royal Society*, pp. 144–148 (London, 1667).

22 See N. Grew, *Musaeum Regalis Societatis or a Catalogue & Description of the Natural and Artificial Rarities Belonging to the Royal Society and Preserved at Gresham College* (London, 1681); and The Royal Society's General Manuscripts, nos. 413–417.

23 Works on monstrous births by James Parsons include *A Mechanical Critical Inquiry into the Nature of Hermaphrodites* (London, 1741); 'An Account of a Preternatural Conjunction of Two Female Children', *Phil. Trans. R. Soc. Lond.* **45**, 526–531 (1749); and 'Account of a Sheep, Shewed Alive to the Royal Society, in November 1754, Having a Monstrous Horn Growing from his Throat', *Phil. Trans. R. Soc. Lond.* **49**, 183–186 (1755–56). K.B. Roberts and J.D.W. Tomlinson, *The fabric of the body: European traditions of anatomical illustration*, p. 433 (Clarendon Press, Oxford, 1992) provides a brief reference to Parsons's drawing abilities.

24 K.B. Thomas, *James Douglas of the pouch and his pupil William Hunter*, p. 16 (Piltman Medical Publishing, London, 1964). For a list of some of his drawings for Douglas see C.H. Brock, *Dr. James Douglas's papers and drawings in the Hunterian Collection, Glasgow University Library: a handlist* (Wellcome Unit for the History of Medicine, University of Glasgow, Glasgow, 1994).

25 On the naturalistic style of representation, see S. Alpers, *The art of describing: Dutch art in the seventeenth century* (John Murray, London, 1983), especially chapter 3; M. Kemp, '"The mark of truth": looking and learning in some anatomical illustrations from the Renaissance and eighteenth century', in *Medicine and the five senses* (ed. W.F. Bynum and R. Porter), pp. 25–60 (Cambridge University Press, 1993); L. Daston and P. Galison, 'The image of objectivity', *Representations* **40**, 81–128 (1992). On the notion of 'virtual witenessing', see p. 492 in S. Shapin, 'Pump and circumstance: Robert Boyle's literary technology', *Social Stud. Sci.* **14**, 481–520 (1984).

26 The Royal Society's *Journal Books*, July 14, 1703; *ibid.*, Dec. 8, 1703; *ibid.*, June 21, 1704; *ibid.*, Feb. 14, 1705; *ibid.*, Dec. 18, 1706; *ibid.*, Feb. 1, 1739; *ibid.*, May 17, 1739.

27 *Ibid.*, April 14, 1703; *ibid.*, Feb. 2, 1704; *ibid.*, Dec. 9, 1736.

28 See K. Pomian, *op. cit.* (note 1), pp. 45–64; P. Findlen, *Possessing nature: museums, collections and scientific culture in early modern Italy* (University of California Press, Berkeley, 1996); and L. Daston and K. Park, *op. cit.* (note 1), pp. 255–290.

29 The Royal Society's *Journal Books*, May 15, 1718.

30 *Ibid.*, Feb. 16, 1716.

31 *Ibid.*, March 8, 1716.

32 *Ibid.*, Nov. 25, 1735.

33 *Ibid.*, Nov. 6, 1736.

34 J. Golinski, 'A noble spectacle: phosphorus and the public cultures of science in the early Royal Society', *Isis* **80**, 11–39 (1989).

35 S. Schaffer, 'Natural philosophy and public spectacle in the eighteenth century', *Hist. Sci.* **30**, 1–43 (1983).

36 Schaffer has focused on electrical demonstrations in mid-eighteenth-century London and on demonstration devices in Georgian mechanics. See S. Schaffer, 'The consuming flame, electrical showmen and Tory mystics in the world of goods', in *Consumption and the world*

of goods in the eighteenth century (ed. J. Brewer and R. Porter), pp. 489–526 (Routledge, London, 1992).

37 The Royal Society's *Journal Books*, March 16, 1738; *ibid.*, May 4, 1738; *ibid.*, Nov. 6, 1736.

38 L. Stewart, *The rise of public science: rhetoric, technology, and natural philosophy in Newtonian Britain, 1660–1750* (Cambridge University Press, 1992), especially chapters 4 and 5. On chemistry as public culture in Britain, see J. Golinski, *Science as public culture: chemistry and enlightenment in Britain, 1760–1820* (Cambridge University Press, 1992).

39 Quoted in L. Stewart, *op. cit.*, pp. 125–126.

40 See P. Fara, *Sympathetic attractions: magnetic practices, beliefs, and symbolism in eighteenth-century England*, pp. 46–65 (Princeton University Press, 1996).

41 *Ibid.*, p. 55.

42 The Royal Society's *Journal Books*, Nov. 8, 1704; *ibid.*, Nov. 7, 1705.

43 *Ibid.*, Feb. 19, 1696. See also Halley, 'An Account of an Animal Resembling a Whelp Voided *Per Anum*, by a Male Greyhound, and of a Roman Altar', *Phil. Trans. R. Soc. Lond.* **19**, 316–318 (1695–97).

44 See P. Fontes da Costa, 'The making of extraordinary facts: authentication of singularities of nature at the Royal Society of London in the eighteenth century', *Stud. Hist. Phil. Sci.* (in the press).

45 The Royal Society's *Journal Books*, Jan. 10, 1730.

46 *Ibid.*

47 See S. Shapin and S. Schaffer, *Leviathan and the air-pump: Hobbes, Boyle, and the experimental life* (Princeton University Press, 1985); L. Daston, 'Baconian facts, academic civility, and the prehistory of objectivity', *Ann. Scholarship* **8**, 337–363 (1991); A. Goldgar, *Impolite learning: conduct and community in the Republic of letters 1680–1750* (Yale University Press, New Haven, 1995); S. Shapin, *A social history of truth: civility and science in seventeenth-century England* (Chicago University Press, 1995).

48 See S. Shapin and S. Schaffer, *op. cit.* (note 46), pp. 72–76; M. Hunter, *Science and society in Restoration England*, p. 29 (Greg Revivals, Aldershot, 1992). Larry Stewart presents a similar view in his *The rise of public science* (*op. cit.*, note 38), p. 8 (Cambridge University Press, 1992).

49 Daston, *op. cit.* (note 47), p. 353.

50 S. Shapin, *op. cit.* (note 47).

51 See J. Tribby, 'Cooking (with) Clio and Cleo, eloquence and experiment in seventeenth-century Florence', *J. Hist. Ideas* **52**, 417–439 (1991); M. Biagioli, *Galileo, courtier: the practice of science in the culture of absolutism* (Chicago University Press, 1993); and Findlen, *op. cit.* (note 28).

52 Findlen, *op. cit.* (note 28), p. 100.

53 On politeness and eighteenth-century society, see N. Elias, *The court society* [1969] (transl. E. Jephcott), pp. 78–116 (Basil Blackwell, Oxford, 1983); J. Brewer, *The pleasures of the imagination: British culture in the eighteenth century*, pp. 101–112 (Harper Collins, London, 1997); and A. Walters, 'Conversation pieces, science and politeness in eighteenth-century England', *Hist. Sci.* **35**, 121–154 (1997).

54 Sprat, *op. cit.* (note 21), pp. 111–115.

55 In particular, see P. Dear, '"*Totius in verba*": Rhetoric and authority in the early Royal Society', *Isis* **76**, 145–161 (1985); and Stewart, *op. cit.* (note 38), pp. 3–30.

56 Bellegarde, *Reflections upon the Politeness of Manners*, 2nd edn, p. 19 (London, 1710).

57 See p. 39 in K. Park and L. Daston, 'Unnatural conceptions: the study of monsters in sixteenth and seventeenth-century France and England', *Past and Present* **92**, 20–54 (1981).

58 See P. Fontes da Costa, *The experience of the singular at the Royal Society of London (1695–1752)*, unpublished PhD dissertation, pp. 149–159 (University of Cambridge, 2000).

59 M.B. Hall, *Promoting experimental learning: experiment and the Royal Society, 1660–1727*, p. 7 (Cambridge University Press, 1991).

60 See p. 239 in Q. Skinner, 'Meaning and understanding in the history of ideas', *Hist. Theory* **8**, 3–53 (1969).

61 In particular, see M. Hunter, *The Royal Society and its Fellows 1660–1700: the morphology of an early scientific institution* (British Society for the History of Science, Chalfont St Giles, 1982); and *idem*, *Establishing the new science: the experience of the early Royal Society* (The Boydell Press, Woodbridge, 1989).

62 M. Hunter, *op. cit.* (note 48), p. 40. This remark is in an anonymous manuscript at The Royal Society entitled 'Proposals for the Advancement of the Royal Society'. See The Royal Society's *Miscellaneous administrative papers of the seventeenth and early eighteenth centuries*, I. 2. 12.

63 Quoted in M. Hunter, *op. cit.* (note 48), p. 44.

64 M. Hunter, *op. cit.* (note 48), p. 71. However, the nature of the relationship between gentlemen and merchants in the period, and especially in the eighteenth century, was more complex than Hunter implies. One of the main issues is whether gentlemen could, and did, become traders and merchants, and vice versa. See N. Glaisyer, *The culture of commerce in England, 1660–1720*, unpublished PhD dissertation, pp. 30–38 (University of Cambridge, 1999).

65 D. Miller, 'Into the valley of darkness: reflections on the Royal Society in the eighteenth century', *Hist. Sci.* **xxvii**, 155–166 (1989). On the history of The Royal Society in the eighteenth century see also R. Sorrenson, 'Towards a history of the Royal Society in the eighteenth century', *Notes Rec. R. Soc. Lond.* **50**, 29–46 (1996), and the special issue—*Did the Royal Society matter in the eighteenth century?*—of the *British Journal for the History of Science*, vol. 32 (1999).

66 *Archeologia* **1**, xxxvii (1770).

67 For a history of the Society of Antiquaries, see J. Evans, *A history of the Royal Society of Antiquaries* (Oxford, 1956).

68 *Ibid.*, p. xxxviii.

69 This can be well illustrated with one of Dr James Douglas's presentations to the Society. At an ordinary meeting on 20 February 1717 he showed several curious figures and also the parts themselves in the dissected hen relating to the ovary and the generation and exclusion of eggs 'which being propounded with great nicety and Demonstrated by the Dr. gave the Society great Satisfaction, and he had thanks for this Entertainment' (The Royal Society's *Journal Books*, Feb. 20, 1717).

70 See, for example, T. Sheldrake, 'A Letter Concerning a Monstrous Child Born of a Woman under Sentence of Transportation', *Phil. Trans. R. Soc. Lond.* **41**, 341–343 (1739–41); F. Drake, 'The Bones of a Foetus Discharged through an Ulcer Near the Navel', *Phil. Trans. R. Soc. Lond.* **45**, 121–123 (1748).

71 See, for example, E. Nourse, 'An Account of the Praeternatural Delivery of a Foetus at the Anus', *Phil. Trans. R. Soc. Lond.* **36**, 435–440 (1729–30). This case is considered by the author to be 'as extraordinary' and 'very like' the one already given by Monsieur Littre in the *Mémoires de l'Académie Royale des Sciences de Paris* for the year 1702.

72 See p. 175 in J. Bate, 'An Account of the Remarkable Alteration of Colour in a Negro Woman', *Phil. Trans. R. Soc. Lond.* **51**, 175–178 (1759–60).

73 On rhetoric and natural knowledge, see A. Gross, *The rhetoric of science* (Harvard University Press, Cambridge, Massachusetts, 1990); and A. Benjamin, G. Cantor and R.R. Christie (eds), *The figural and the literal*: *problems of language in the history of science and philosophy, 1630–1800* (Manchester University Press, 1987).

74 See S.C. Lawrence, 'Anatomy and address: creating medical gentlemen in eighteenth-century London' in *The history of medical education in Britain* (ed. V. Nutton and R. Porter), pp. 199–228 (Rodopi, Amsterdam, 1995).

75 S. Myddelton, 'An Account of an Extra-Uterine Conception', *Phil. Trans. R. Soc. Lond.* **43**, 336–340 (1741–45), p. 336.

76 D. de Superville, 'Some Reflections on Generation, and on Monsters, with a Description of Some Particular Monsters', *Phil. Trans. R. Soc. Lond.* **41**, 294–307 (1739–41). De Superville was elected F.R.S. on 13 November 1740.
77 The Royal Society's *Journal Books*, April 24, 1740.
78 Parsons was elected F.R.S. on 7 May 1741; he published his work on hermaphrodites in July of the same year.
79 For the Grand Tour in the eighteenth century see A. Wilton and I. Bignamin, *Grand tour: the lure of Italy in the eighteenth century* (Tate Gallery Publishing, London, 1996).
80 The Royal Society's *Journal Books*, Dec. 20, 1711.
81 Quoted in Arnold, *op. cit.* (note 18), p. 61.
82 [T. Clerk], *A List of the Royal Society of London*, p. 10 (London, 1718).
83 On 'curious' specimens in Sloane's Museum, see M. Day, 'Anatomical, pathological and curious human specimens in Sloane's museum', in *Sir Hans Sloane, collector, scientist, antiquary* (ed. A. MacGregor), pp. 69–76 (British Museum Press and Alistair McAlpine, London, 1994).
84 See *Gentlemen's Magazine*, 1748, p. 301; and Smollett, *The Adventures of Peregrine Pickle*, pp. 346–347 (London, 1751).
85 See p. 230 in R. Stearns, 'John Winthrop (1681–1747) and his gifts to the Royal Society', *Publ. Colonial Soc. Mass., Trans.* **xlii**, 206–232 (1964).
86 R. Stearns, *Science in the British colonies of America*, p. 94 (University of Illinois Press, 1970).
87 *Ibid.*, p. 99.
88 *Ibid.*, p. 107.
89 The Royal Society's *Journal Books*, Oct. 27, 1720; *ibid.*, Feb. 10, 1726; *ibid.*, Feb. 27, 1729.
90 Nicholson and Burnet were elected F.R.S. on 4 December 1706 and 3 February 1706, respectively. For statutes governing fellowship for colonials, see R. Stearns, *op. cit.* (note 86), pp. 106–114.
91 The Royal Society's *Journal Books*, June 27, 1734. The catalogue of the collection offered by Winthrop is included in the minutes of the Society. On the donations of his grandfather John Winthrop Jr, F.R.S., Governor of Connecticut, see R. Stearns, *op. cit.* (note 86), pp. 117–139.
92 R. Stearns, *op. cit.* (note 85), p. 227.
93 *Ibid.*, pp. 227–228.
94 The Royal Society's *Journal Books*, Oct. 28, 1731; *ibid.*, Nov. 8, 1739; *ibid.*, Oct. 27, 1737.
95 *Ibid.*, Feb. 16, 1721; *ibid.*, Oct. 24, 1734.
96 K.T. Hoppen, *The common scientist in the seventeenth century: a study of the Dublin Philosophical Society 1683–1708*, p. 140 (Routledge & Kegan Paul, London, 1970).
97 The Royal Society's *Journal Books*, June 6, 1705; *ibid.*, Feb. 10, 1726; *ibid.*, Feb. 27, 1727; *ibid.*, April 13, 1727; *ibid.*, March 16, 1732.
98 Indeed, some of the advertisements for public exhibitions of monsters published in newspapers of the period used the name of The Royal Society to attract a wider audience. One of them, for instance, described Daniel Cajanus as 'The Giant who has had the Honour to be view'd by his Majesty and all the Royal Family, most of the Nobility, and the Royal Society, with the utmost Satisfaction', Advertisement from May 28, 1744, in *Collectanea or a Collection of Advertisements and Paragraphs from the Newspapers Relating to Various Subjects*, collected by D. Lysons, vol. I, p. 9, n.pub, n.d. (British Library c. 103. K. 11). Similarly, one of the advertisements for John Coan proclaimed that he was 'the famous Norfolk Dwarf, or perfect Man in Miniature, who has had the Honour of being seen by his Majesty at his Royal Palace at St. James, and by the learned Body of the Royal Society, (who allow him to be the greatest Perfection of the Dwarf Kind that ever Nature produced)', *Daily Advertiser*, 24 December 1751, in *ibid.*, p. 36.
99 *Op. cit.* (note 44).

100 The Linnean Society was founded in 1788. On the history of this institution, see A. Gage and W.T. Stearn, *A Bicentenary of the Linnean Society of London* (Academic Press, London, 1988).