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THE FOUNDING OF ST PETERSBURG IN THE CONTEXT OF THE ROYAL SOCIETY'S RELATIONSHIP WITH RUSSIA

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SUMMARY

From the Society's first Charter in 1662 to Peter the Great's productive visit to England during 1698, and from the founding of St Petersburg in 1703, three centuries ago, until the city became the official capital in 1712, the Society's contacts with Russia developed in many different ways.

ORIGINS OF CONTACTS

On 17 December 1662 Dr William Croune informed The Royal Society that Dr Samuel Collins, visiting England, had offered to correspond with the Society from Russia. Collins, physician to Tsar Alexis, was accompanying a full-scale Russian embassy sent to re-establish relations with England after the Restoration. His offer led to meetings with Robert Boyle, whom, over the years, he supplied with a mass of data about the effects of cold and freezing, as well as Russian natural history, incorporated by Boyle in his writings. Even more of Collins's information about Russia was extracted from his letters to Boyle and published in Collins's posthumous work, *The present state of Russia* (1671).[1]

PETER THE GREAT'S VISIT TO ENGLAND

The 26-year-old Tsar arrived in London from Holland on 11 January 1698 as part of his Grand Embassy to European countries accompanied, for his multi-purpose visits, by a large entourage, which included Aleksandr Menshikov, the future statesman and field-marshal, and the Moscow-born Colonel James Bruce, a prominent Russian figure who likewise became a field-marshal. Among numerous other places such as the Woolwich Arsenal and Oxford University, the Tsar visited The Royal Society on 27 January, the Royal Observatory at Greenwich on 6 February and 9 March—where Flamsteed was Astronomer Royal—and the Royal Mint (in the Tower of London) on 13 and 21 April, when Isaac Newton was its Warden.[2]

One of Peter's main reasons for visiting both Holland and England was to obtain practical experience in shipbuilding as part of his drive to expand the Russian fleet. After

working with ships in Holland, he had met King William III at Utrecht in the latter part of 1697, who had persuaded him that the theory of shipbuilding was better understood in England than in Holland. As a result, Vice-Admiral Benbow had to vacate his tenancy of John Evelyn's manor-house, Sayes Court, at Deptford, close to the royal dockyards, to enable the Tsar and his retinue to move in on 6 February 1698. On 11 March the 22-ton 'Royal Transport', the earliest naval schooner and the fastest ship in the English fleet, designed by Admiral Peregrine Osborne, Lord Carmarthen, was handed over to the Russians as a present to the Tsar from King William in return for trading privileges being granted to English tobacco merchants. This took place shortly after the Tsar had twice struck other vessels with the 'Dove', a small yacht that had been hired at Greenwich for his use! The Tsar particularly valued his acquaintance with Edmund Halley, who instructed him in seamanship, guiding him with his sailing experiments, for instance, at Deptford when the pink, 'Paramore', a small sailing ship, was also rigged and floated for him that March. As its first 'captain', Peter is said to have remarked that 'he would far rather be an admiral in England than Tsar in Russia'.'Paramore' had been built for Halley's proposed magnetic surveys of the Atlantic, and Halley set sail in her in October 1698.[3]

On about 20 March, Moses Stringer, a chemist linked by marriage to Admiral Benbow, performed some spectacular experiments with metals and minerals for the Tsar at Sayes Court by special request. Stringer became Mineral Master General of the amalgamated Societies of Mines Royal and Mineral and Battery Works between 1709 and 1710. (Boyle was elected to both societies in December 1664; Newton, who salvaged some of the companies' dispersed records, became a deputy governor of the corporation in April 1709.) Stringer and his acquaintance John Colbatch, the apothecary and physician, knighted in 1716, were both living at that time in the York House Estate off the Strand, generically known as York Buildings. Samuel Pepys (PRS 1684–86) also had a house there, at no. 19 Buckingham Street (1688–1701), where he received The Royal Society on Saturday evenings, and the Tsar lived in Norfolk Street before moving to Evelyn's house at Deptford.[4]

The Russian suite also comprised two of the Tsar's medical staff. Johann Termond was the senior court surgeon, who systematically tutored the Tsar in surgery. He had much earlier travelled as physician to TsarAlexis's 1669 Persian embassy, with none other than the later well-known Dutch travel writer Jan Struys as his 'servant'. The other medical man, Peter Posnikov, the first native Muscovite to obtain a medical degree (at Padua, 1694–95), was commissioned to buy medicines, medical books and a pneumatic pump for a diving machine, and recruited medical personnel while in England. His stay was extended so that he could inspect English institutions. An unusual item from him (there may be more) that found its way into Sloane's Catalogue of Minerals reads:

> 257. This is a plempxci a present from the King of Persia to the Czar of Muscovy. It was given by Dr. Posnikove the Czars physitian to Sr. John Colbatch. Who told him that it was good for everything. From Sr. John Colbatch.[5]

Peter the Great's visit to England directly stimulated two works about Russia in 1698, both connected with The Royal Society. Jodocus Crull from Hamburg (MD Cambridge 1691 and elected a Fellow of the Society in the same year) published an account of *The*

antient and present state of Muscovy, with many references to and quotations from Samuel Collins's book of 1671—the latter a widely influential work, translated into several languages. It, too, resurfaced, in 1698, under the title of *An historical account of Russia, containing the customs and manners of the people, and a description of the vast dominions subject to His Majesty, the Czar of Muscovy*—now very rare. Petiver quotes from this edition apropos Collins's much cited account of Russian mushrooms.[6]

On 17 April 1698 John Colson, with whom the Tsar dined on 7 February, received payment to teach Colonel James Bruce for six months. Bruce was largely responsible for purchasing scientific instruments and books on navigation and shipbuilding. Colson (*fl.* 1671–1709), a friend of Edmund Halley's, had run a boarding school at Wapping in all the mathematical sciences, especially navigation, and he had communicated his observations of the lunar eclipse of 1 June 1676 from there to The Royal Society. He also examined boys from Christ's Hospital School for Trinity House. In July 1692 he moved to a house in Goodmans Fields, near the Minories. His namesake (1680–1760), possibly a younger relation, who was elected FRS in 1713, held the Lucasian chair of mathematics at Cambridge, earlier occupied by Newton, from 1739. He may have shared the same premises in Goodmans Fields. In July 1693 the Russia Company paid the clockmaker Richard Colson £65 for a watch with two gold cases as one of several gifts destined to be sent to the Tsar in Russia in an attempt to renew its trading privileges. On 18 April 1698, three days before the Tsar left Evelyn's house at Sayes Court (in a complete mess!), homeward bound, John Colson received 160 gold guineas for a small yacht of cypress wood built for Peter, but about which nothing further is known.[7]

The Tsar's stay in Sayes Court is commemorated by the present 'Czar Street' in Deptford, as is Admiral Benbow in 'Benbow Street'.

The Tsar sailed from England in the 'Royal Transport' to the Dutch port of Helvoetsluys, which he reached on 26 April 1698, with personnel he had recruited. Captain John Perry, the hydraulic engineer, had been recommended by Lord Carmarthen and the Surveyor-General of the Navy. Between 1699 and 1701 he worked on building a Volga–Don Canal, unfinished because of the Russo-Swedish war; he then became Comptroller of Maritime Works in September 1701, completing a dock on the River Voronezh for Peter by 1703. Henry Farquharson was probably the 'Mathematician' visited by the Tsar on 5 and 6 April 1698, first on horseback and then by a Thames sloop. Appointed to head the School of Mathematics and Navigation opened at Moscow in 1701, he was accompanied to Russia by Stephen Gwyn and Richard Grice, students from the Royal Mathematical School at Christ's Hospital. Another recruit on board was Dr Gottfried Klem from Danzig.[8]

London–Moscow: Petiver's correspondence with Klem

James Petiver (FRS 1695), Apothecary to the Charterhouse from 1700, kept a busy shop near Long Lane in Aldersgate Street. An inveterate collector, he maintained a vast network of contacts and correspondents. He evidently arranged to correspond with Dr Gottfried Klem after meeting him during the Tsar's London visit. Shortly after his arrival in Moscow, Klem was examined at the Apothecaries Chancery by Dr Laurentius

Blumentrost, Senior, who certified his competence to practise medicine in Russia, whereupon he was appointed a court physician with special responsibilities for the health of Crown Prince Alexis.

Klem's five surviving letters to Petiver from Moscow (10 January to early December 1700) were initiated by his letter of 8 December 1698, acknowledged by Petiver in his reply dated 28 January 1699, directing that it be 'left with Frans Timerman at Moscow & Goods to be left with Mr Reinhoult Dickinson of Archangel'. Timerman, a Dutch mathematician and military engineer, taught the Tsar to use the astrolabe. His observations of a lunar eclipse at Moscow with a telescope on 5 April 1688 specifically for The Royal Society, enabled the longitude of Moscow to be determined accurately for the first time. He served in the Tsar's 1695–99 campaigns to capture the Turkish fortress of Azov, which blocked the mouth of the River Don. An engraving shows him holding a plan of the besieged fortress for Peter to inspect before its capture in 1699.[9]

Klem's correspondence with Petiver is very good value. As guidelines, Petiver had presumably supplied Klem in advance with a copy of his printed sheet, *Brief directions for the easie making and preserving collections of all natural curiosities*, possibly supplemented by the far more extensive *Brief instructions for making observations in all parts of the world: as also for collecting, preserving, and sending over natural things, etc.*, which was drawn up in 1696 'at the request of a person of honour; and presented to the Royal Society'. As Klem explained to Petiver in his first extant letter, very few persons collected 'curiosities' in Moscow, so that he had been obliged to gather specimens himself. In fact during 1700 he collected a very wide selection of plants, insects, animals, minerals, fossils and shells; some of the items came from Persia, via a returning Swedish envoy. Writing to London on 10 January 1700 after his return to Moscow from Azov, Klem regretted that

> My trunck, by setting over the River, by Asoff, with the Reer Admiraels trunck, who both ware upon one wagon, is fallen in the Dohn, so are all the plants and insects gone.

Nevertheless he had managed to bring some insects from Azov. In exchange for all these objects, and some caviar, Klem received from Petiver a watch, headgear, black silk stockings and gloves, French necklaces, books about England and Russia, and 'Cochleariae' (spiralled shells?), the latter destined for 'a great Lord who could pay it'. In his final letter of the series (December 1700), Klem told Petiver that 'his Majesty is at Narva, and he hath lefft me here, to take care of the Princes health'. A few years later, on 17 January 1703, Gottfried Klem married Agatha Westhof, daughter of the Dutch banker Paul Westhof (who established the first sugar refinery at St Petersburg in 1720). Tragically, Klem drowned in the Neva at Schlüsselburg (59° 57′ N, 31° 02′ E) before his son Paul's baptism at Moscow on 22 November 1703. His widow subsequently married Dr Johannes Deogat Blumentrost (1676–1756), appointed Archiater and President of the (renamed) Medical Chancery after the death of Robert Erskine, Peter's chief physician, on St Andrew's day in 1718. He was the brother of Laurentius Blumentrost, Junior (1692–1750), the first President of the Russian Academy of Sciences inaugurated in 1725.[10]

The founding of St Petersburg

When Peter the Great travelled down the Don to the Black Sea in 1699, he was still preoccupied with the Turkish war. However, his thoughts had also turned to the vital importance of Baltic outlets and the need to Europeanize Russia. At that time nearly all the Baltic coast belonged to Sweden, having been conquered by a succession of outstanding monarchs equipped with one of the best armies in Europe. The Russians finally signed a treaty with the Turks in July 1700, and Peter, heading a Russian–Polish coalition, declared war on Sweden that August. After an initial defeat at Narva in November 1700 and further campaigns against the Swedes over the next years, eventually, in October 1702, Peter stormed the key Swedish position of Nöteborg, at the exit of the River Neva from Lake Ladoga, renaming the fortress Schlüsselburg. Continuing down the Neva to its mouth, he captured the small fort of Nyenschantz to the north of the river in May 1703, renaming it St Petersburg. (Artillery Major-General James Bruce, promoted to Field-Marshal in 1704, played a conspicuous part in the capture of Nyenschantz.) The cornerstone of St Petersburg, with its first fortress of earthwork structure, was laid on 27 May 1703—the day after Samuel Pepys's death. Here the fortress church of Peter and Paul was dedicated on 29 June 1703, the feast of Saints Peter and Paul, the Tsar's name-day (figure 1).[11]

Figure 2, a *Plan of St Petersburg; with its Fortifications, built by Peter the Great in 1703*, is reproduced from the *Gentleman's Magazine* for August 1749. Though undated, it clearly relates to an earlier stage of the city's construction, as seen by the wording in the top-left corner which reads: *Wasili Osterow or Menzikoff's Island designed for a new City and laid out, in Canals and Streets, in which are already some Buildings*. (A small section outlining the city's location, above this, has been omitted here.) A detailed key is provided to the plan with no less than five references to Prince Menshikov's property—his palace, gardens, stables and church—in addition to 'The Empress's garden, summer-house, stables and attendants'. Aleksandr Menshikov, St Petersburg's first Governor and the earliest Russian to be elected a Fellow of The Royal Society (in 1714), was a favourite of the Empress Catherine I, whom Peter married as his second wife in 1712. Menshikov virtually ruled the country during Catherine's reign (1725 until her death in 1727) and Peter II's minority when, ousted by court intrigues, he was banished to Siberia, where he died in 1729. The French writer Aubry de la Motraye, visiting St Petersburg in 1726, paints a vivid picture in his *Voyages and travels* of Menshikov's palace and gardens at Oranienbaum on the Gulf of Finland, his Cronstadt house, and his palace on Vasily (or St Basil's) Island, given to him by Peter the Great.[12]

St Petersburg: the capital

On 26 November 1703 John Evelyn recorded in his *Diary* that the 'effects of the hurricane and tempest of wind, rain, and lightning, through all the nation, especially London, were very dismal. Many houses demolished and people killed'. Indeed the Great Storm across southern England flooded the Thames and Severn valleys, sank 15 battleships in Bristol and killed at least 8000 people. Four days later the Scottish physician and surgeon

Figure 1. The Tsar directing St Petersburg's foundations, 1703. Engraving courtesy of the Ashmolean Museum, Oxford (Talbot 425).[11]

Robert Erskine was elected to the Fellowship of The Royal Society. Early in the summer of 1704 he left for Moscow to take up a post as Menshikov's doctor, was appointed physician to Peter in January 1705, and in 1706 was promoted to be his principal doctor and Archiater of the entire Russian medical services.

St Petersburg was designated the official Russian capital in 1712. Continuing his meteoric rise, Robert Erskine directed the transfer of the Apothecaries (Medical) Chancery from Moscow, supervised the formation of a library and natural history museum at Peter's Summer Palace, and oversaw the founding of a large physic garden on Apothecaries' Island of the new capital in February 1714—the precursor of the Komarov Botanical Institute. The Royal Society, having instituted a Russia Committee at the beginning of 1713, drew up a comprehensive list of 53 'Enquirys for Russia' covering all aspects of natural history and philosophy, travel and trade, much of the material culled from Samuel Collins's and Henry William Ludolf's works about Russia. These, together with Petiver's instructions for collecting natural history specimens, were ordered to be forwarded with letters, for reply, to Erskine and Henry Farquharson, but the

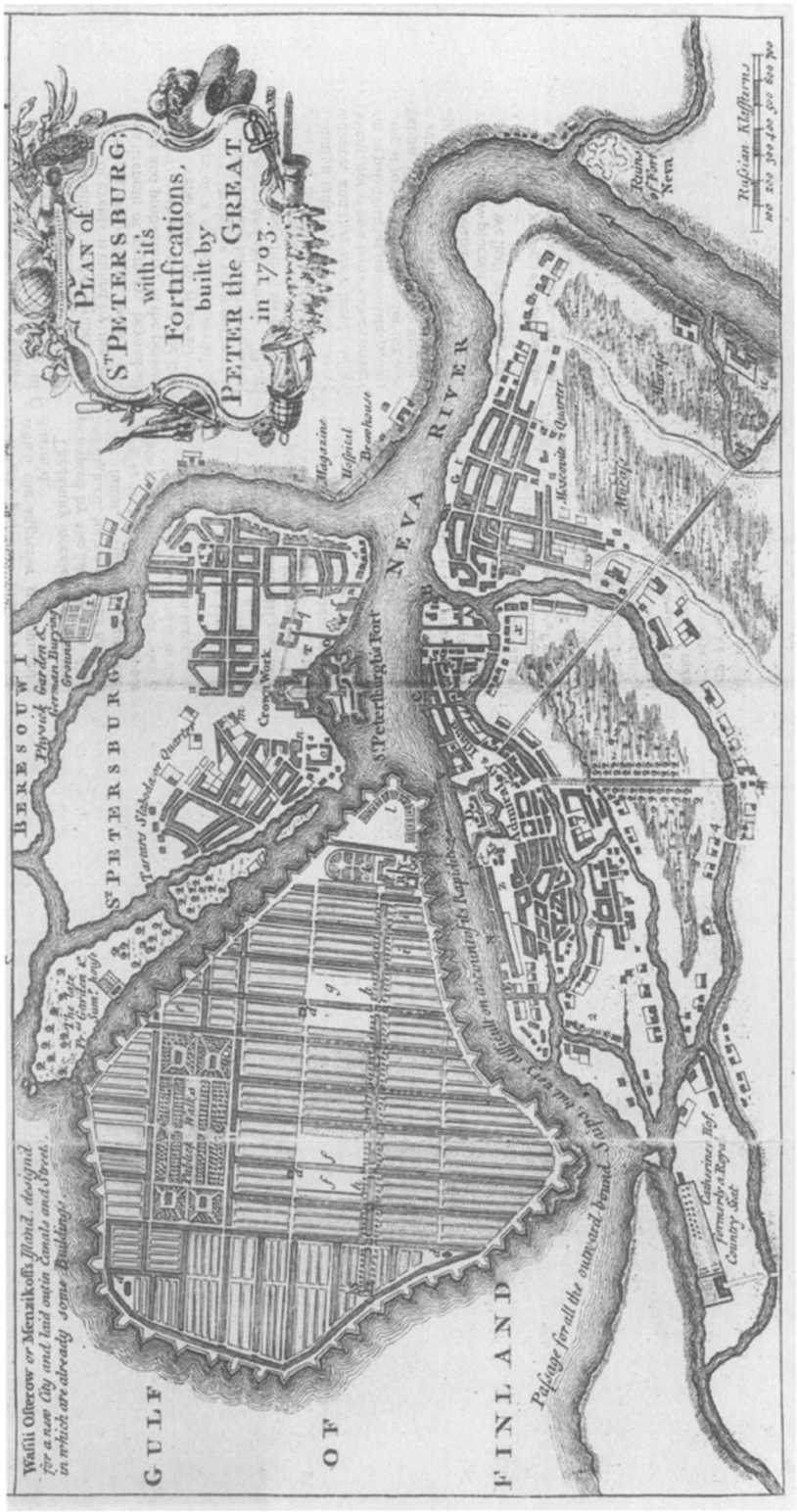

Figure 2. 'Plan of St Petersburg'. From *Gentleman's Magazine*, August 1749.
(By permission of the British Library (RAR.052).)

results are unknown. At the Committee's meeting of 26 February 1713 Sloane remarked, in connection with the 32nd query—the then obscure nature of 'Mammotougy' (namely, mammoth bones)—that Ludolf's *Grammar* described several unusual bones of this substance dug up in Russia. Henry Ludolf (1655–*ca.* 1712), from Erfurt in Saxony, was early orphaned and brought up by his uncle Hiob Ludolf, the famous orientalist, proficient in 23 languages. He served for a while as secretary to Prince George of Denmark before spending over a year in Russia (1693–94), delighting the Tsar with his performances on the bass-viol. The year 1696 saw the publication of his *Grammatica Russica*, the first significant grammar of the Russian, as distinct from the Slavonic, language. An appendix (pp. 104–109) provides considerable information about Russian natural history, often commercially oriented, which suggests that his Russian visit was partly motivated by trade considerations. Moreover, this appendix reappeared as 'Some curious observations concerning the products of Russia', in a supplement to Adam Brand's account, published in 1698, of the Russian embassy to China, from 1693 to 1695, which was based on the journal of its ambassador, E. Isbrand Ides.[13]

The Bronze Horseman

'The Bronze Horseman', Pushkin's last great narrative poem, written in 1833 and published posthumously in 1841, immortalized, 'as incarnate in the *genius loci* of the city', the name of St Petersburg's famous bronze equestrian statue of Peter the Great (figure 3). Unlikely as it may seem, this statue has several connections with The Royal Society. Begun by the sculptor Étienne Falconet around 1769, it was only unveiled in August 1782. A letter from him to the Empress Catherine indicates that when Platon, Archbishop of St Petersburg and Bishop of Tver, wanted to see the model of the statue before it was cast, Falconet used the interpreting services of his friend, the Reverend John Glen King (1732–87), Chaplain to the city's English Church. In June 1770 King left Russia on a two-year leave of absence, taking with him a pair of earrings made from a piece of the statue's massive granite pedestal, as a gift for Lady Macartney, wife of Sir George, the special British envoy to Russia from 1764 to 1767. King, who was elected a Fellow of The Royal Society and the Antiquarian Society of London in 1771, published his book on *The rites and ceremonies of the Greek church, in Russia* during 1772.[14]

King's eventual successor as Chaplain to the St Petersburg English Church, the Reverend William Tooke, another of Falconet's friends, had his translation of letters and articles about the equestrian statue printed in 1777 under the title of *Pieces written by Mons. Falconet, and Mons. Diderot on sculpture*. Figure 2 from his book (which was published by John Nichols) is the first printed plate of the statue. It was drawn by Peter Falconet, the sculptor's son, and engraved by James Basire, Junior. While on leave in England, Tooke also was elected a Fellow of The Royal Society, in 1783.[15]

Falconet's statue of the Bronze Horseman was at length unveiled, with ceremony, on 7 August 1782. Its location is in the small Peter's Square, leading off the Admiralty Embankment that extends east from the recently renamed English Embankment running along the River Neva's south side. The front of the square, facing the river, near the Admiralty building, used to be linked with Vasily Island by a pontoon bridge. Today

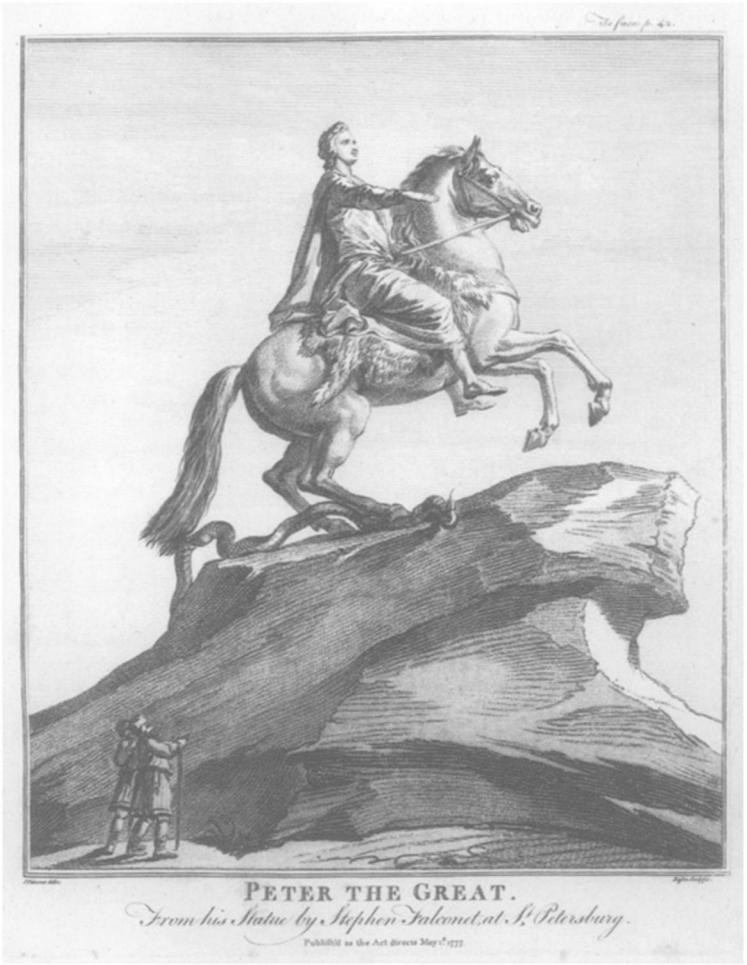

Figure 3. Falconet's 'Bronze Horseman' (1777). (By permission of the British Library (561.* d.8(2)).)

no. 56, along the western section of the English Embankment, marks the site of the former English Church.[16]

The colossal granite rock pedestal of the statue carries the brief inscription, in Latin: 'To Peter the First—Catherine the Second'. It commemorates the centennial of Peter's succession to the throne, possibly with an unintentional play of words between 'petra' (rock) and 'Petro' (to Peter). The Royal Society's *Journal Book* for 4 May 1786 reports that

> A Golden Medal on the inauguration of the Statue of Peter the Great at Petersburgh, presented to the Society by Order of the Empress of Russia, was laid before the Meeting together with a letter from Count d'Ostermann Vice Chancellor of the Empire, signifying the Empress's thanks to the Society for the present made Her of Capt. Cook's medal.

This relates to one of the Society's five gold presentation medals struck in 1784. The Empress Catherine gave the medal to the Museum of the Imperial Academy of Sciences at St Petersburg. Designed by Lewis Pingo, engraver of the Royal Mint, and adapted by

T. Trotter, it forms the frontispiece of Kearsley's 1784 editions of *An abridgement of Captain Cook's last voyage* and *A compendious history* of the same. The Society appears not to have the Falconet/Catherine medal in its possession. It is of interest, however, that on 7 January 1783 the jeweller Alexander Gardner presented the Society of Antiquaries of Scotland with

> a cast, in block tin, of a medal of the present Empress of Russia; on one side, the bust of the Empress, in profile, her head laureated; on the other, the equestrian statue of the Czar Peter the Great, on its great pedestal of granite, struck in August 1782.[17]

St Petersburg, Peter's metropolis, remained the Russian capital until 1918, but it still retains its unofficial status as the country's second capital. As will have been seen, The Royal Society's connections and relations with Russia, before, during and after the founding of the city in 1703, proved to be varied and meaningful. They developed and became even more significant with the establishment of the Russian Academy of Sciences in 1725, and particularly during the 1730s and 1740s.

Acknowledgements

I express my gratitude for their helpful co-operation to Ruth Wallis, Elizabeth Baigent, Research Director of the *New Dictionary of National Biography*, and to Nicholas Millea, Map Curator of the Bodleian Library.

Notes

1 J.H. Appleby, 'Ivan the Terrible to Peter the Great', *Med. Hist.* **27**, 289–304 (1983), pp. 296–297. Evelyn described the Russian embassy's arrival and audience in November and December 1662: *The diary of John Evelyn* (ed. E.S. De Beer), vol. 3 (Clarendon Press, Oxford, 1955), pp. 344 and 349.

2 V. Boss, *Newton and Russia. The early influence, 1698–1796* (Harvard University Press, Cambridge, MA, 1972), pp. 17–20.

3 W.F. Ryan, 'Peter the Great's English yacht', *Mariner's Mirror* **69**, 65–87 (1983). A. Cook, *Edmund Halley. Charting the heavens and seas* (Clarendon Press, Oxford, 1998), p. 263. *The three voyages of Edmund Halley in the 'Paramore'* (ed. N.J.W. Thrower), Hakluyt Society, second series, vol. 156 (Hakluyt Society, London, 1980) pp. 29–33.

4 J.H. Appleby, 'Moses Stringer (*fl.* 1695–1713): iatrochemist and Mineral Master General', *Ambix* **34**, 31–45 (1987). L.C.C., 'Survey of London', *The Strand* **18**, 74–75, 134 (1937).

5 J.T. Alexander, 'Posnikov', in *The modern encyclopedia of Russian and Soviet history*, vol. 51 (Supplement) (Academic International Press, Gulf Breeze, FL, 1989), pp. 228–232. R.H. Dalitz and G.C. Stone, 'Doctor Bernard Connor: physician to King Jan III Sobieski and author of *The history of Poland* (1698)', *Oxf. Slav. PP*, N.S. **19**, 14–35: Appendix of Connor's conversation with Posnikov (5 and 19 April) and Termond (21 April 1698). Connor was elected FRS in November 1695. Natural History Museum, Sloane's Catalogue of Minerals, vol. 3(A): 'Ambers, bitumens and ambergrease', etc.

6 Wilhelm Graf, 'Samuel Collins' *Moskovitische Denkwürdigkeiten*', in *Slavisch–Baltische Quellen und Forschungen* (Sachsische Forschungsinstitut für Indogermanistik: Slavische Abteilung, Leipzig, 1929), vol. 4, pp. viii–x. The 1679 French translation also reappeared—in 1699. BL, Sloane MS 3337, ff. 121–122 ('J. Petiver Adversaria').

7 Boss, *op. cit.* (note 2), pp. 2–4. *Britten's old clocks and watches, and their makers*, 9th edn (ed. G.H. Baillie *et al.*) (Batsford, London, 1982), p. 407. E.G.R. Taylor, *Mathematical practitioners of Tudor and Stuart England* (Cambridge University Press, 1954), p. 264. Letter from Ruth Wallis, 19 September 2001. Guildhall Library, MS 11,741/2, f 171. A 'Case of Mathematical Instruments all Silver' was also shown at the Court meeting, receipted for £14 10s. 0d. See also the list of scientific and mathematical instruments, clocks, etc., purchased in 1698 by Henry Styles, the Tsar's financial agent, for which he received payment of £586 14s. 8d.: W.F. Ryan, 'Scientific instruments in Russia, from the Middle Ages to Peter the Great', *Ann. Sci.* **48**, 367–384 (1991). For the damage to Sayes Court, its gardens, and Benbow's possessions (the Earl of Carmarthen was the next tenant), see Evelyn's *Diary, op. cit.* (note 1), vol. 4, pp. 287 and 290, and *Calendar of Treasury Books*, vol. 13, p. 325 (1933) and *Calendar of Treasury Papers*, vol. 2, pp. 188–189 (1871).

8 J.H. Appleby, 'Mapping Russia: Farquharson, Delisle and the Royal Society', *Notes Rec. R. Soc. Lond.* **55**, 191–204 (2001). M.M. Bogoslovsky, *Pëtr I*, vol. 2, p. 379 (reprinted by Mouton, The Hague and Paris, 1969).

9 W. Richter, *Geschichte der Medicin in Russland* (Moscow, 1815), vol. 1, p. 108. BL, Sloane MSS 3333, ff. 248–250 and 4063, ff. 2, 8, 27, 38 and 52. Appleby, *op. cit.* (note 8), p. 192.

10 Richter, *op. cit.* (note 9). For Klem's letters and specimens to Petiver, see also J. Britten, *The Sloane Herbarium* (ed. J.E. Dandy) (British Museum (Natural History), London, 1958), p. 151, and R.P. Stearns, 'James Petiver, 17th century promoter of natural science', *Proc. Am. Antiq. Soc.* **62**, 278–279 (1953) (October 1753 reprint: American Antiquarian Society, Worcester, MA). Petiver's works make several references to items from Klem. Sloane purchased Petiver's collection in 1718. Natural History Museum: Sloane MS Catalogue, 'Testac', vol. 2: Klem's small Persian whelk and 'Klem's Russia Muscle' (found by him between the River Don and Azov), etc. On opposite page, in different hand, under the same entry: '4721. Fifteen specimens in Sloane Coll. July 12 1889.'

11 Sir Bernard Pares, *A history of Russia* (Jonathan Cape, London, 1958) pp. 227–230. L. Hughes, *Russia in the age of Peter the Great* (Yale University Press, 1998), p. 210. *Leningrad. Its monuments and architectural complexes* (Aurora Art Publications, Leningrad, 1977).

12 *Gents Mag.* **19**, 344–345 (August 1749). A. De la Motraye, *The voyages and travels of A. De la Motraye, in several provinces and places of the kingdoms and dukedoms of Prussia, Russia, Poland, &c*, vol. 3, pp. 165–169. A lengthy list of subscribers in vol. 1 includes Newton, Sloane, Woodward and William Sherard among several Fellows of The Royal Society (1732). J.H. Appleby, 'James Spilman, F.R.S. (1680–1763), and Anglo-Russian commerce', *Notes Rec. R. Soc. Lond.* **48**, 17–29 (1994). N. Millea's catalogue, *Street mapping, an A to Z of urban cartography* (Bodleian Library/Ashmolean Museum, Oxford, 2003), describes the exhibition held at the Bodleian Library between February and April 2003. It contains reproductions of eight engraved plans, from the Ashmolean Museum, of St Petersburg in varying stages of evolution, from 1700 to 1840 (pp. 20, etc.). Illustration no. 12, a fine engraving by Antonio Zatta and sons of Venice and P.A. Novelli, shows Peter the Great (all 6 feet 8 inches of him) directing building operations in 1703 from a plan of the city as it begins to take shape (pp. 18–20).

13 Evelyn's *Diary*, *op. cit.* (note 1), vol. 5, p. 550. Appleby, *op. cit.* (note 1), pp. 301–303. Also J.H. Appleby, 'Robert Erskine—Scottish pioneer of Russian natural history', *Arch. Nat. Hist.* **10**, 377–398 (1982). J.S.G. Simmons, 'H.W. Ludolf and the printing of his *Grammatica Russica* at Oxford in 1696', *Oxf. Slav. PP* **1**, 104–129 (1950). Adam Brand, *A journal of the embassy from ...John and Peter Alexievitz, Emperors of Muscovy, &c. overland ... to Peking by E. Isbrand Ides...* (London, 1698). An 'authorized' account, apparently by Ides himself and published in England and France during 1706, became famous as one of the chief sources of Defoe's sequel, *The further adventures of Robinson Crusoe* (1719). Ludolf, a close friend of Posnikov's, presented The Royal Society with some mammoth bones from Moscow: R S MS 414, section 2, 'Of the Elephant'.

14 Prince D.S. Mirsky, edited and abridged by F.J. Whitfield, *A history of Russian literature* (Knopf, New York, 1958), p. 94; A. Cross, *By the banks of the Neva* (Cambridge 1997), pp. 105–106.

15 W. Tooke's anonymous translation of J.G. Georgi's *Russia, or a compleat historical account of all the nations which comprise that empire*, 4 vols. Advertisement at the end of vol. 1 (1780).

16 Cross, *op. cit.* (note 14), pp. 10–11 and 90–91. John Rogerson (FRS 1779), Tooke's friend and doctor, and personal physician to Catherine the Great, lived at no. 60, the English Embankment, while Sarah Greig, widow of Admiral Samuel Greig (FRS 1782), Admiral of the Baltic Fleet, had a house at no. 62: A.L. Fullerton and F. Yarmukhamedova, *The family Greig in Russia* (Bernardston Books, Bernardston, MA, 2001), p. 70. Figure 33, on p. 79, shows the interior of the English Church at no. 56. For Greig, see J.H. Appleby, 'Woronzow Greig (1805–1865), F.R.S., and his scientific activities', *Notes Rec. R. Soc. Lond.* **53**, 95–106 (1999).

17 *Royal Society Journal Book Copy*, vol. 32 (1785–1787), pp. 255–256. Details of the resolution proposed by the Society for a medal to be struck in Cook's honour, and an account of its distribution, are given by C.R. Weld in his *History of the Royal Society* (John W. Parker, London, 1848), vol. 2, pp. 137–144. W. Smellie, *Account of the institution and progress of the Society of Antiquaries of Scotland*, part 2, p. 75. A full description of the published plate of Cook's medal (the obverse) is given in J.C. Beaglehole's *The life of Captain James Cook* (Black, London, 1974), vol. 3, pp. 695–696. In November 1781 John Nichols donated to the Antiquaries of Scotland a copy of his publication of Tooke's 1777 translation of Falconet's and Diderot's letter containing the first-ever plate of the statue: part 1, p 76.