

THE PAPER MUSEUM OF THE ACADEMY OF SCIENCES IN ST PETERSBURG

C. 1725-1760



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Cover illustration 0659 High platform shoe. The sole depicts a mermaid (?) surrounded by several figures. Object from the west Indies (?), early 18th c.

THE PAPER MUSEUM OF
THE ACADEMY OF SCIENCES
IN ST PETERSBURG
C. 1725-1760
Introduction and Interpretation

Edited by

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Royal Netherlands Academy of Arts and Sciences, 2005

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PREFACE & ACKNOWLEDGEMENTS

It is no coincidence that the Russian-Dutch project ‘The Paper Museum of the Academy of Sciences in St Petersburg’ is connected with the name of Peter the Great. This Russian Emperor, like the history of Russia generally, is closely linked to the Netherlands. When he founded the *Kunstkamera* in St Petersburg, Peter the Great’s idea was to implement the best of the cultural and scientific knowledge he had acquired during his travels in Western Europe. With the *Kunstkamera* in mind, he purchased the outstanding collections of the Amsterdam scientists and collectors Frederick Ruysch and Albertus Seba, as well as watercolours by Maria Sibylla Merian. Moreover, he profited from the immense experience of the Dutch in creating collections that were not only enjoyed and admired but also used for educational purposes, demonstrating the richness of nature and human skills.

A few years ago a group of scholars in Amsterdam and St Petersburg collaborated on an exhibition called *Peter the Great and Holland, cultural and scientific relations between Russia and the Netherlands at the time of Peter the Great*. This exhibition was held in the State Hermitage Museum, St Petersburg, and the Amsterdam Historical Museum. It was a great success and engendered various plans and ideas that required further research, including a second large-scale collaborative project. This resulted in the publication of what has become known during the course of the project as the ‘Paper Museum’. Diverse explanations have been given for why *all* the objects of the *Kunstkamera* collection were to be depicted. Everyone does agree, however, on one thing: the result is a unique collection of watercolours giving us an idea of what the collections of the *Kunstkamera* were like in the first half of the eighteenth century. The collection of watercolours is truly amazing, from the point of view of both scholars and everyone interested in art.

Russian-Dutch projects usually concern direct tangible contact between the two countries – the history of relations between the Russian and Dutch people, exchanging exhibitions and works of art, politics, etc. This project is of special significance. Many of the drawings are, of

course, of objects purchased in Holland as part of the collections of Ruysch and Seba mentioned above. This is very important for us as the staff of museums and archives who are used to dealing with material objects and documents. But the 'Paper Museum' project gave scholars representing different schools of thought and fields of scholarship in Amsterdam and St Petersburg a wonderful opportunity for intellectual co-operation and exchanging ideas. The result is this catalogue.

During the last five years a large team of curators and researchers in St Petersburg and the Netherlands have collaborated on this project. On the Russian side, dr. Natalya P. Kopaneva, researcher at the Archives of the Academy of Sciences (St Petersburg Branch), must be named first. She has co-ordinated the project on the Russian side with dr. Georgy Vilinbakhov, deputy director of the State Hermitage Museum. In the Netherlands, the co-ordination was in the hands of dr. Debora J. Meijers, associate professor of the Department of Art History of the Universiteit van Amsterdam, and drs. Renée E. Kistemaker, senior consultant on policy development and research at the Amsterdam Historical Museum. Thirteen curators and researchers of the State Hermitage Museum, the Academy of Sciences (St Petersburg Branch) and the Russian Museum have worked on the project in their various special fields. I would like to thank them all for their enormous contribution.

A scientific advisory board supported the project in the Netherlands. The members of this board were prof. dr. Rob Scheller, prof. dr. Rob Visser, drs. Eric Dil, dr. Jan van Campen, drs. Han Vermeulen, drs. Paul Beliën, drs. Bert van de Roemer and drs. Jozien Driessen. Their constructive, critical comments have contributed to the quality of the project. In addition, Jozien Driessen has made her expertise available to the project all these years and in many ways: as a specialist in 17th and 18th-century Russian history, as a Russian-Dutch translator, as an editor when needed and as a 'liaison officer' between the Russian and Dutch teams.

In such an extremely encyclopædic project, additional expert information in different subject fields is often essential. The following Dutch curators and researchers have contributed to the catalogue entries: dr. Willem Mörzer Bruyns, curator of the Netherlands Maritime Museum Amsterdam and dr. Peter de Clercq to the entries about scientific instruments; dr. C. Smeenk, dr. R.W.R.J. Dekker, dr. M.S. Hoogmoed and dr. A.M. Voûte, all of Naturalis, the National Natural History Museum in Leiden, and Willem Hogenes, head of the collection of the Department of Entomology of the Zoological

Museum in Amsterdam. With their individual specialisms, they have all contributed to the zoological catalogue texts. My thanks to them all for their involvement and time, which they have generously given to the project.

Natalya Kopaneva and the art historian drs. Bert van de Roemer edited the catalogue texts. In addition, Bert van de Roemer was responsible for the co-ordination of the checking of the English version of the catalogue by the Dutch specialists, as well as the extensive work of co-ordinating the illustrations in the Netherlands and the Russian and English texts for the production of the DVD. He and his computer were the ‘centre of operations’ for the catalogue and his scholarly insight has contributed to the quality of the project. The mammoth task of translating the Russian texts into English was in the capable hands of dr. Yuri Kleiner, translator and professor at the Department of General Linguistics of the State University of St Petersburg. Jean Vaughan, assisted by Kate Williams in a later phase of the project, translated the Dutch texts into English and revised the English edition.

I would also specifically like to mention Edita, publisher of the Royal Netherlands Academy of Arts and Sciences. It was particularly gratifying that they were prepared to take on not only the publication of the English edition of ‘The Paper Museum’ but also the production of the English/Russian DVD, making all the drawings in the corpus accessible in a special way.

Such a project cannot be realized without the financial support of others. The Netherlands Organization for Scientific Research financed the research, the photography of all of the drawings and part of the translations for the first two years. The Wilhelmina E. Jansen Fund supported the publication of the Russian edition of the book by the Yevropeysky Dom publishing house in St Petersburg.

Lastly, I would like to wish the scholars of St Petersburg and Amsterdam as much success with future joint enterprises as with this project. The book not only concludes this project; it is the starting point, possibly the inspiration, for new research.

Pauline W. Kruseman
Director
Amsterdam Historical Museum

Peter the Great's *Kunstkamera*, encyclopædic in nature, was the first public museum in Russia. In 1724, it was incorporated into the Imperial Academy of Sciences. It can justly be called the forerunner, or even fountainhead of many of today's institutions that form the Russian Academy of Sciences. Planned and organised as a scientific museum, it was also open to the public – functioning as an educational institution as well. Tsar Peter's view was that the varied and encyclopædic *Kunstkamera* collections contributed to the enhancement of his subjects' cultural refinement and to a better insight into the world of science.

Starting around 1730, the artists and craftsmen of the Academy began on the systematic depiction of the objects in the *Kunstkamera* collection; this work may have been done for a catalogue of the museum's 'curiosities', that was to be illustrated with engravings. Under Count Kirill Razumovsky, president of the Academy of Sciences in St Petersburg from 1746-1798, the Academy took a decision to arrange for the publication of an illustrated catalogue of the *Kunstkamera* objects; in 1774 the Academician Semyon Kotelnikov was to make descriptions of the rare objects that were meant to be engraved, but the book was never published and the manuscript has never been discovered.

Fortunately, the Archives of the Academy of Sciences (St Petersburg Branch), the State Hermitage Museum and the Russian Museum have preserved their watercolour drawings representing the Academy collections of the *Kunstkamera*. They give us an idea of what the Museum was like before the great fire of 1747 which destroyed large parts of the collection. In addition to this the watercolour drawings allow us to form an impression of the type of acquisitions that arrived in the late 1740s to 50s.

After the publication of the 1741-45 catalogue *Musei Imperialis Petropolitani Vol. I-II*, some of the drawings showing 'rare old golden treasures' were actually engraved, but remained unpublished. The copper engraving plates were damaged by the fire and later disappeared, which makes the 26 extant prints of these plates extremely rare.

The present catalogue of these remarkable watercolour drawings, a considerable amount of which has still not been found, is the result of a joint-effort over many years on the part of Russian and Dutch botanists, zoologists, anthropologists, orientalisists, historians, archæologists, numismatists, and historians of science and art.

Information concerning the provenance of the items of the first Russian museum can be found in hundreds of inventories and files

from the eighteenth-century Academy Archives. In the present edition only some of these have been published for the first time, viz. the documents related to the 'Paper Museum'. Hopefully, future archival research will result in discoveries that will shed light on the curiosities and antiquities that nowadays adorn the *Kunstkamera*, the Hermitage, the Russian Museum, and other institutions in the northern capital of Russia.

Dr. Irina Tunkina
Director
Archives of the Russian Academy of Sciences
(St Petersburg Branch)

Drawings dating from the beginning of the 18th century, made by Russian artists are extremely rare.

Above all they are important as historical documents fixing objects, collected in the first Russian public museum, the museum of the Academy of Sciences. Besides, the watercolours by masters like A. Grekov, I. Sokolov, M. Makhaev and J. Nechaev demonstrate the professional skills of the craftsmen, working in Sint-Petersburg, even when at the time the Russian capital had no Academy of Arts.

The State Russian Museum is proud to be in possession of a collection of drawings of objects from the *Kunstkamera*. It is pleased to offer those interested in the culture of the 18th century the possibility to learn about these unique drawings in a publication prepared by Russian and Dutch scholars.

Y.N. Petrova
Vice director for research
The State Russian Museum

Over 2,000 drawings after the *Kunstkamera* objects are preserved at present in the State Hermitage Museum, the Archives of the Russian Academy of Sciences (St Petersburg Branch), and the Russian Museum. They give you an idea of the nature of the collection and the level of draughtsmanship to be seen in the country's first public museum in the first half of the eighteenth century. In many ways the works far exceed anything to be found in other European curiosity collections. A prerequisite for this winning formula was undoubtedly the unique cooperation between the Museum and the Academy of Sciences. In that period the *Kunstkamera* functioned as a type of laboratory for the newly created Academy: the scientists supplying the museum with the products of their research and the objects they had found during Academy expeditions.

The drawings, which have become study objects for scholars from the State Hermitage Museum, the Russian Academy of Sciences, the Russian Museum and academic institutions in Amsterdam, depict the contents of the museum's cabinets that have enjoyed European fame. They are unique, because, during the many years of the *Kunstkamera*'s history, its collections have not been kept in their original formation, many of the exhibits having been moved to the State Hermitage Museum, the Museum of Zoology, the Institute of Botany, and other institutions. Therefore this collection of drawings allows one to travel back in time and see the *Kunstkamera* of the Academy of Sciences as it was: a wonderful museum, encyclopædic in nature, with a top-ranking collection that complied with the most rigorous scholarly standards.

The international joint-project 'The Paper Museum of the St Petersburg Academy of Sciences' is now drawing to a close. Five years of joint-work has resulted in an opulent final product. The reader can see before him a Russian and an English edition of the catalogue with the welcome addition of a DVD depicting all the drawings hitherto discovered.

I would like to thank my colleagues who worked with us on this book, and I hope it will find its way to grateful readers who themselves will be encouraged to carry out new studies.

Dr. Georgy Vilinbakhov
Vice-Director
The State Hermitage Museum

INTRODUCTION

Anyone who is interested in the history of collections, whether of paintings, plants or scientific instruments, regularly comes into contact with a specific kind of source material: drawings or prints of objects that the collector in question owned or wanted to own, or illustrative material that the collector wanted to have within reach for research purposes. There has actually been a growth of interest in such representations during the last fifteen years, as can be seen not only from ambitious publications such as the volumes of *The Paper Museum of Cassiano dal Pozzo* (1996-) or the large-format *Le Bestiaire de Rudolph II* (1990), but also from various articles.¹ The present publication and DVD belong to the same field of inquiry. They present a complete catalogue of the more than 2,000 sheets that have been identified to date of what we have called the paper museum of the Academy of Sciences in St Petersburg. The interpretative articles included in this publication are intended to throw light on the possible functions of the corpus.

The drawings – mainly watercolours, plus a smaller number of pen drawings in Indian ink – were made in the period between about 1725 and 1760. They are kept in three institutions in St Petersburg: the Archive of the St Petersburg branch of the Russian Academy of Sciences; the Hermitage; and the Russian Museum. It is interesting that most of them are still in the original boxes in which they were kept at the time. These boxes, originally totalling 58 in all, were included in the first catalogue of the museum of the imperial Academy of Sciences, *Musei Imperialis Petropolitani Vol. I-II* of 1741-1745 (hereafter MIP), where their contents are described as *Icones pictæ rerum quæ in Academiæ thesauris insunt*.² (ill. 3 and 5)

The first two boxes, that were filled with drawings of the two buildings of the Academy, unfortunately had to be left out of account in the present publication because too little is known about them.³ We have concentrated on the drawings of the objects that were on display in the buildings concerned, particularly in the recently constructed museum, the *Kunstkamera* (ill. 1): drawings of anatomical preparations, animals,

1. E.g. Olmi 2000 and 2001b.

2. The title of this catalogue is usually cited incorrectly, namely without *Vol. I-II*. However, these words are an integral part of the title, for it is the nominative *Vol.* that accounts for the genitive *Musei*. The title of the catalogue is thus: *Vol. I-II of the Imperial Petersburg Museum*.

3. The drawings mentioned by Meijers in Exh. cat. Amsterdam 1996 (figs. 13-16, pp. 29-30 and note 28) probably formed a part of them.

plants, tools and scientific instruments, ethnographic objects (especially from Siberia and China), antiquities, coins and medals. It is regrettable that the premature death of Tsar Peter the Great, the founder of this scientific institute, in January 1725 robbed him of the opportunity to enjoy these drawings.

The objects on display were drawn in workshops in the Academy next to the *Kunstkamera*. There, in this former palace of the Tsarina Prascovia Federovna (the widow of Peter's brother Ivan), specially selected groups of Russian students were trained by Dutch, German, and later also Russian drawing masters. Some drawings were done elsewhere and were added to the collection along with the objects that they represented.⁴

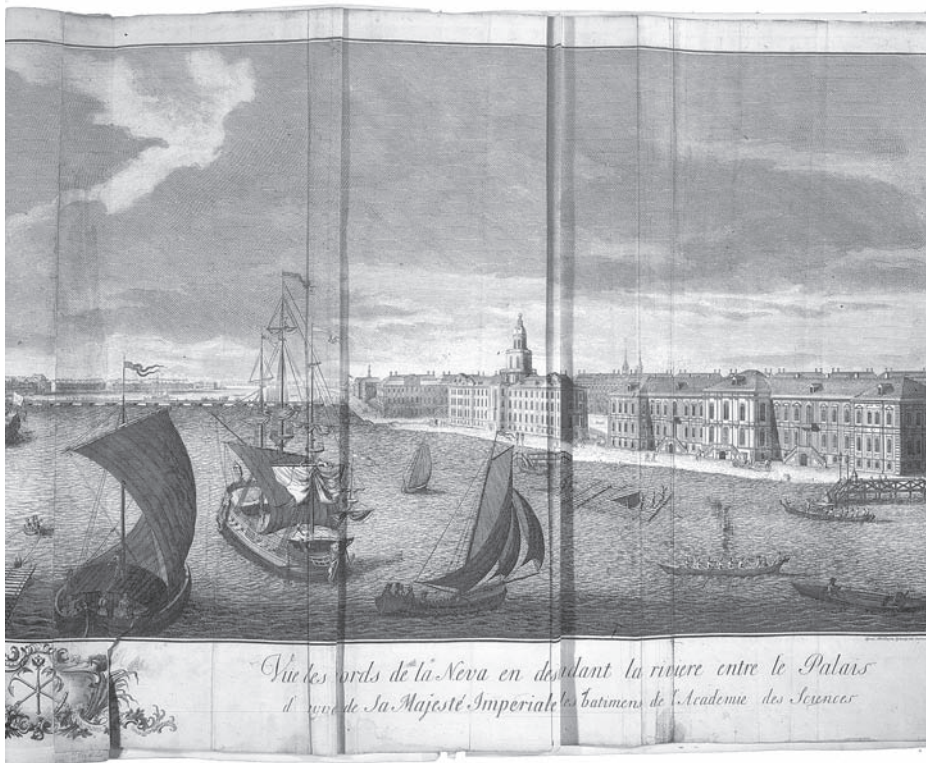
A key factor for our research was the fact that a large number of the sheets contain contemporary inscriptions. In a limited number of cases (about 5 % of the sheets, so far as we know at present) the name of the draughtsman and the date when the drawing was made are given; the earliest year is 1732 and the latest is 1753. The sheets have also numerous references to the numbers of the objects in question in the catalogue of 1741-1745. As this catalogue lists the objects in the order in which they were exhibited in the rooms, the numbers also indicate where the objects were displayed. Thanks to this, and to the fact that even many of the drawings without an inscription could still be linked to a catalogue number (and thus a place number), it eventually proved possible to arrive at a visual reconstruction of the collection. The fact that about 80 % of the present corpus admits of such an identification with the items listed in the catalogue of 1741-1745 is interesting for another reason too. It shows that, despite the fact that the collection of the Academy of Sciences continued to expand after the publication of the catalogue, drawing activities after 1745 were still primarily concentrated on the objects that had been in the collection before that date.

In order to fully understand the genesis of the drawings, it is necessary to outline the origin of the *Kunstkamera* and the Academy of Sciences.⁵ They were both created in a gradual process that began around 1700 following Western European examples, and just as in Europe, the construction of an imperial collection had preceded the foundation of an Academy in Russia. The Academy was eventually established in 1724, while there was already a cabinet of the tsar in Moscow long before Peter I transferred his court to St Petersburg in 1712.

This cabinet entered a new stage when Peter had some of its contents moved to his summer palace in the new capital in 1714, result-

4. For instance, fish and shells from Siberia were sent together with drawings of them in 1752. On 29 October 1753 a hand-shaped root that had been found 'in the garden of the guard Lambus' was incorporated in the *Kunstkamera* along with a drawing of it. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), doc. 164, pp. 378-383.

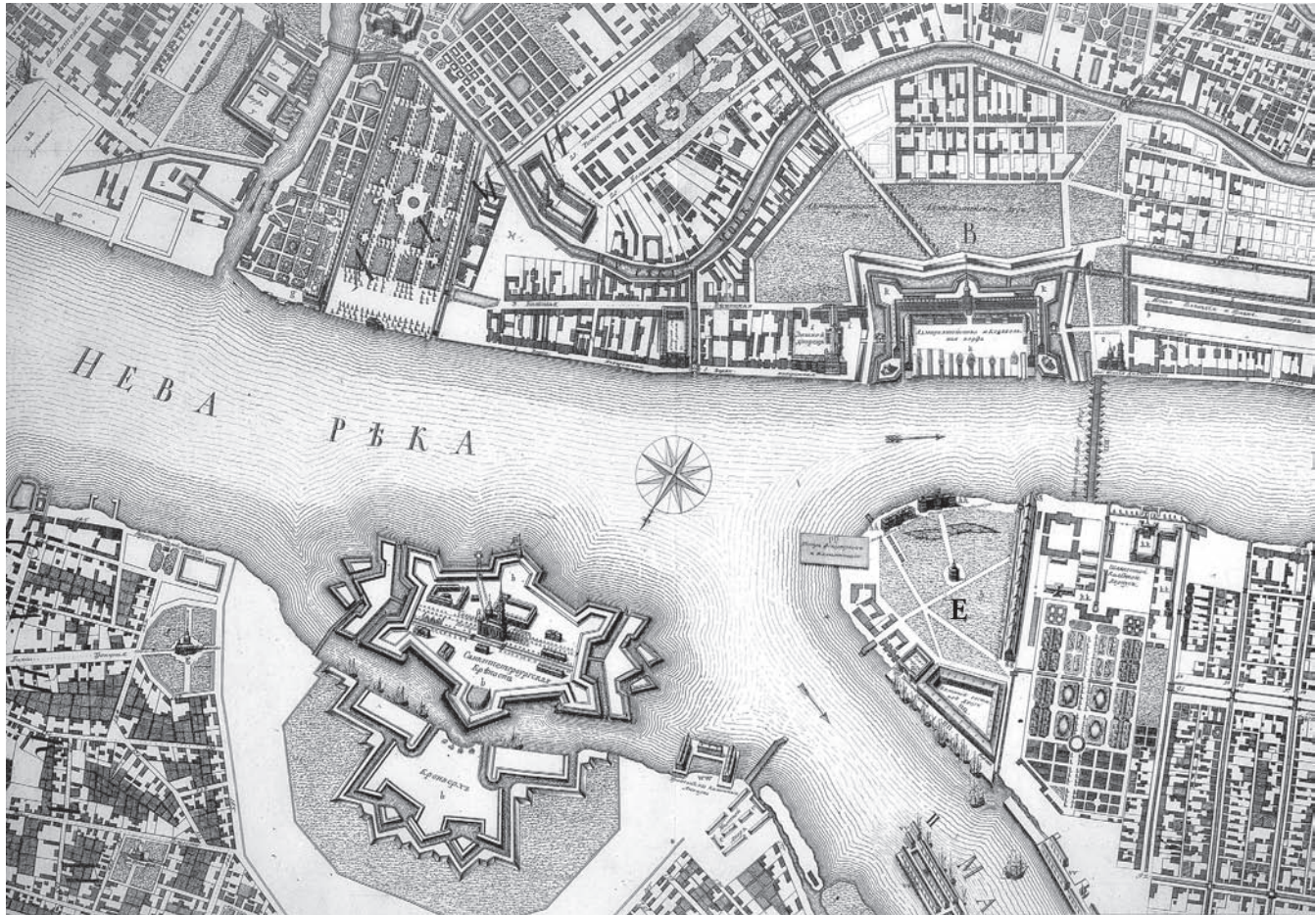
5. See e.g. Exh. cat. Amsterdam 1996, Exh. cat. Dortmund/Gotha 2003, Exh. cat. St Petersburg 2003.



ill. 1. Bank of the Neva with the Kunstkamera and to the right of it the Academy of Sciences. Engraving from: Ivan Sokolov, Mikhail Makhayev, *Plan de la capitale de St. Petersbourg avec ses avenues les plus illustres* (St Petersburg, 1753)

ing in a collection of naturalia and books. At first the composition of the collection was on a fairly modest scale, but that situation soon changed, especially from 1716 when the tsar acquired the entire cabinet of the Amsterdam apothecary Albertus Seba shortly before embarking on his second European trip. He made important purchases during that trip in Paris and Torgau, for example, where he bought scientific instruments and books, and in Amsterdam, where his acquisitions included the anatomical cabinet of Frederick Ruysch and a large number of drawings of flowers and insects by Maria Sibylla Merian. The expanded collection required new premises for its proper display, and the choice fell on the former palace of a nobleman who had fallen from favour, Alexander Vasilyevich Kikin.

From the moment of its transfer to 'the house of Kikin' in 1718, the collection was no longer a *Kunst- und Wunderkammer* but a 'public' museum where any interested party could gain admission and be shown around. The presence of a library and laboratory is evidence that the institute was aimed at the acquisition and dissemination of knowledge. Moreover, considerable care was lavished on the presentation of the collection. This task was entrusted to Maria Dorothea Gsell, a daughter of Maria Sibylla Merian who had entered the em-



ill. 2. Andrey Polyakov, Ground plan of the centre of the city, with the Kunstkamera and the Academy of Sciences (in section E). Slightly to the right the long Twelve Colleges building can be seen. On the opposite bank of the river are the Admiralty and the Winter Palace. Engraving from: Ivan Sokolov, Mikhail Machayev, *Plan de la capitale de St. Petersbourg avec ses avenues les plus illustres* (St Petersburg, 1753).

ploy of the tsar together with her husband Georg when Peter I was in Amsterdam. The ‘house of Kikin’, however, was only an interim solution. In the same year, 1718, Peter decided to establish new, large-scale premises for the collections on the southern bank of Vasilievsky Island, facing the Admiralty and the Winter Palace. That was where one of the first public museum specially designed for that purpose was erected in the history of European collections. It may not be entirely fortuitous that it was built immediately adjacent to the new centre of government, the Twelve Colleges building, which was constructed between 1724 and 1732 (ill. 2).

As building work on the new museum progressed, the collection continued to grow. After the death of his personal physician, the Scot Robert Areskin, who was also head of the *Kunstkamera*, the tsar purchased Areskin’s important library and cabinet of naturalia in 1719. In the same year the tsar embarked on plans to bring a learned society to the attention of foreign academics via his German librarian Johann Daniel Schumacher. Schumacher wrote to the German philosopher Christian Wolff that the tsar wanted to found a ‘Societæt von gelehrten Leuten’ in St Petersburg ‘welche die Kuenste und Wissenschaften zu excolieren sich befeiszigten sollen’; he hoped that Wolff ‘sie einrichte, dirigire und derselben eine Lüstre gäbe’.⁶ After due consultation, Wolff decided not to give up his chair in Halle for an uncertain existence in distant Russia, upon which the plan was further elaborated in St Petersburg itself. This resulted in the foundation of the Academy in January 1724. Almost right from the start it accommodated not only the sciences but also a print shop and an engraving workshop. The first scholars arrived soon. They were almost all (very young) Germans, including the anatomist Johann Duvernoi, the botanist Johann Christian Buxbaum, and the historian Gerhard Friedrich Müller, who will all reappear in the following contributions. The German orientation is primarily due to the fact that Christian Wolff acted as adviser and Schumacher also played a role in recruitment. The tsar had dispatched Schumacher to Europe in 1721 to buy books and objects for the collection, as well as to arouse interest in the plans for the academy among potential members. This all indicates how closely the building up of the collection of the *Kunstkamera* and the formation of an Academy were intertwined at this period. Schumacher’s acquisitions included a part of the numismatic cabinet of Johann Lüders in Danzig and a quantity of antiquities from Nicolaas Chevalier in Utrecht, and he also established useful contacts with several prominent academics, such as Sir Hans Sloane in London.⁷

6. Hofmann 1971, pp. 164ff.

7. Thomas 1988; Meijers 2003.

8. SPBARAN, f. 1, op. 3, no. 2, 161
obverse - 162.

Drawing was already going on in the collection before the establishment of the Academy of Sciences. In 1716 Tsar Peter had already invited Maria Dorothea and Georg Gsell – the former produced natural scientific gouaches and watercolours, the latter history paintings, portraits and still lifes. They were able to carry out the various forms of painting that the tsar wanted to expand in Russia. Maria Dorothea is the most important in relation to our researches. She was explicitly appointed to paint the animals, plants, art works and antiquities in the *Kunstkamera* ‘mit waszerfarben nach dem leben’ and was responsible for the interior arrangement of the rooms, as we know from a draft contract of 1 September 1723.⁸ Among her other tasks was the training of young (Russian) draughtsmen, apparently in connection with the *Kunstkamera* collection too, for students from her studio are to be found among the artists dealt with in the present publication. An example is Andrey Grekov, one of the best artists in the corpus. This is why we have investigated the period from about 1725, even though the workshops in the Academy only began to function in the following year and the first dated *Kunstkamera* drawings are from 1732. Nor should the choice of the year 1760 to mark the end of the period under investigation be taken too strictly, as the last dated drawings are actually from 1756, after which drawing activities were gradually reduced in the workshops of the Academy of Sciences.

The period in question was of crucial importance for the history of the Academy. It underwent a turbulent development in the first decades of its existence, though it would go beyond the bounds of the present publication to go into that here. Nevertheless, the setting up of the studios in the late 1720s and the various positions assigned to this department for arts and crafts in the Academy of Sciences over the years are discussed in some detail (see the contribution by Elena Stetskovich). The political context of these developments within the young Academy could only be treated in summary fashion, in spite of the questions that arise in this connection. For instance, it is remarkable that the drawing activities went on steadily right through the period from about 1725 to 1760, marked as it was by six successive rulers (if we include Tsar Peter I) and several conspiracies and coups d'état. It looks as though this continuity should be attributed to Johann Daniel Schumacher. As head of the Academy chancellery, down to his death in 1761 he championed particularly those departments of the institute that were concerned with arts and crafts: the print shop and the studios. Following in the wake of Peter the Great, Schumacher was aware that the arts and sciences could only be broadened in Russia if the resources and manpower were available to print and illustrate

publications. He also fully grasped the importance of visual propaganda – a type of visual material that was also designed and executed in the Academy – for those in power. It would therefore be worthwhile to submit this figure, who was controversial in his day and has not been given the treatment he deserves from Academy researchers to date, for once to a more unprejudiced scrutiny.

The Russo-Dutch research project

This publication is the result of years of cooperation between researchers in St Petersburg and Amsterdam. In fact the idea goes back to 1994, when the exhibition *Peter the Great and Holland. Cultural and scientific relations between Russia and the Netherlands in the age of Peter the Great* was being prepared. A large number of the drawings were catalogued by Jan van der Waals in connection with that exhibition.⁹ Several of them were on display in that exhibition (Hermitage, St Petersburg and Amsterdam Historical Museum, 1996-1997), which led to a further increase of interest in these drawings. The plan ripened to carry out further research on this wealth of material and sources of funding were explored. After the Netherlands Organization for Scientific Research (NWO) had granted a two-year subsidy, mainly to be spent on the research by the Russian participants and on photographing all of the drawings, work commenced in April 1999.

By that time a team had been put together consisting of curators and researchers, most of whom had already been involved in the exhibition *Peter the Great and Holland*. They represented a wide range of disciplines, corresponding to the types of objects in the drawings, as well as specialists in the history of drawings and prints. The team members are drawn from the three institutions where the drawings are kept, plus the Peter the Great Museum for Anthropology and Ethnography, the Zoological Museum and the Botanical Institute, which all fall under the aegis of the Russian Academy of Sciences. On the Dutch side the researchers involved in the project were drawn from the University of Amsterdam, the Huizinga Institute of Cultural History, and the Amsterdam Historical Museum.¹⁰ Cooperation of this kind is unique and places high demands on all of the participants. It is inherent in a project like this that the participants work towards a final product that goes beyond the boundaries that separate the modern disciplines: what are today the specialised fields of anatomy, zoology, botany, astronomy, geography, ethnology, oriental studies, archaeology and numismatics have to be fused to form a whole. Only then can full justice be done to the significance of the encyclopædic *Kunstkam-*

9. Van der Waals' typescript of *Musei Imperialis Petropolitani* (hereafter referred to as MIP) Vol. II, *pars prima* (1741), where he related all of the drawings of artificialia known at the time to the descriptions of the objects in question in the MIP, as well as investigating to what extent the objects in the collection of Albertus Seba can be identified in the drawings and in the MIP, was an important source for our project. We would like to thank him for making this information available.

10. For a full list of those involved see the credits.

era of the first half of the eighteenth century which was the foundation of the drawings under investigation.

Besides the interdisciplinary character of the project, its international and intercultural aspect should be mentioned. Distances of a geographical, linguistic, theoretical and technical kind had to be bridged, but we have learnt from one another to find solutions. It is for the reader to evaluate the results of this cooperation, which we ourselves have experienced as a very fertile one.

We are not the first to investigate these drawings. Initially they were primarily used as a source to determine the provenance of specific objects. That was probably why the Hermitage was lent a number of sheets by the Academy in 1922.¹¹ Tatyana Stanyukovich was the first to pay attention to the drawings in the 1950s for a different reason: she used them as a source of information about the history of the *Kunstkamera*.¹² Ten years later, in 1965, Tatyana Shafranovskaya made an important contribution by using the drawings to reconstruct the composition of the collection as it was before the fire of 5 December 1747,¹³ when the *Kunstkamera* building was seriously damaged and a large number of objects, particularly the Chinese and Siberian ones and the animals, were destroyed. The drawings still help us to form a good impression of the original composition of the collection.

Shafranovskaya also investigated the inscriptions that were applied to many of the drawings when they were made, enabling her to collect information about when they were made and by whom. She also made the connection between these inscriptions and the first printed catalogue of the *Kunstkamera*, the *Musei Imperialis Petropolitani Vol. I-II* (St Petersburg 1741-1745; hereafter MIP). (ill. 3) Since the inscriptions refer to the catalogue numbers under which the illustrated objects are described in the MIP, the at times puzzling objects in the drawings (by the scientific standards of the time) can be identified. These eighteenth-century descriptions can then be compared with present-day scientific insights.

A further impulse was given to research by Oleg Neverov in tracing objects in the collections of the Hermitage that are represented in the drawings. He has published several articles on the subject since the early 1980s. In addition, he organised an exhibition on Tsar Peter's *Kunstkamera* in the Hermitage in 1992, when a number of drawings were reunited with their objects.¹⁴

The next stage was the exhibition *Peter the Great in Holland* in 1996-1997 (see above). On this occasion too several drawings were exhibited, in a number of cases together with the objects represented in them.

11. See the contribution to the present publication by Galina A. Printseva on the vicissitudes of the drawings in the nineteenth and twentieth centuries.

12. Stanyukovich 1953 and 1958.

13. Shafranovskaya 1965. The fire of 1747 crops up in several of the contributions to the present publication.

14. Neverov 2001; Exh. cat. Hermitage 1992.

Shafranovskaya's research on the artists has been continued by Elena Stetskevich, who published an extensive article on the production of the drawings in the studios of the Academy of Sciences in 1997.¹⁵ Her contribution to the present publication is a sequel to this.

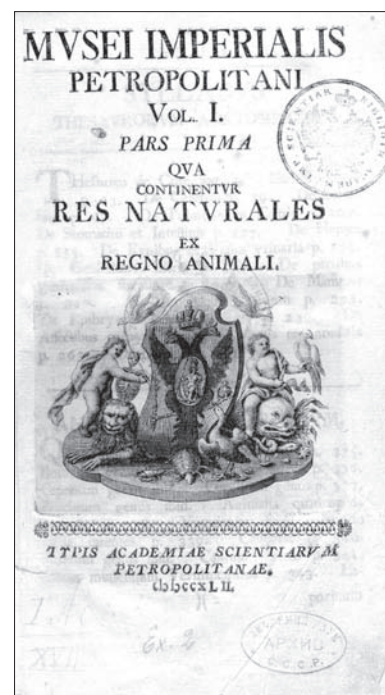
Finally, the exhibition *Palast des Wissens. Die Kunst- und Wunderkammer Zar Peters des Grossen* (Dortmund and Gotha 2003) must be mentioned. Several Russian curators and researchers participating in the paper museum project were also involved in the preparations for that exhibition, and considerable attention was devoted to the drawings on that occasion too. Since the present research project was already at an advanced stage during the preparation of the exhibition in Dortmund, Natalya Kopaneva, Debora Meijers and Bert van de Roemer were invited to publish some of their findings in the catalogue, while Renée Kistemaker contributed a more general article on the culture of collecting that Tsar Peter found in the Netherlands.

The purpose of the present project is in an important respect different from that of previous investigations. Although the present publication provides information about the history of the *Kunstkamera* collection, the objects that are represented in the drawings, and the draughtsmen themselves, its main emphasis lies elsewhere. Right from the start, the primary objective was to consider the drawings as a *corpus*, in other words, to investigate which factors led to the carrying out of such large-scale and systematic drawing activities in a particular institution (the Academy of Sciences with its *Kunstkamera*) on one particular site (St Petersburg) in one particular period (ca. 1725–1760). Before trying to find answers to this question, the complete corpus of the sheets available to date had to be catalogued and made accessible. That is where the emphasis of the present publication lies. In addition to the complete catalogue on DVD, the book presents a series of introductions to the different categories of objects and four essays that place the corpus within an interpretative framework.

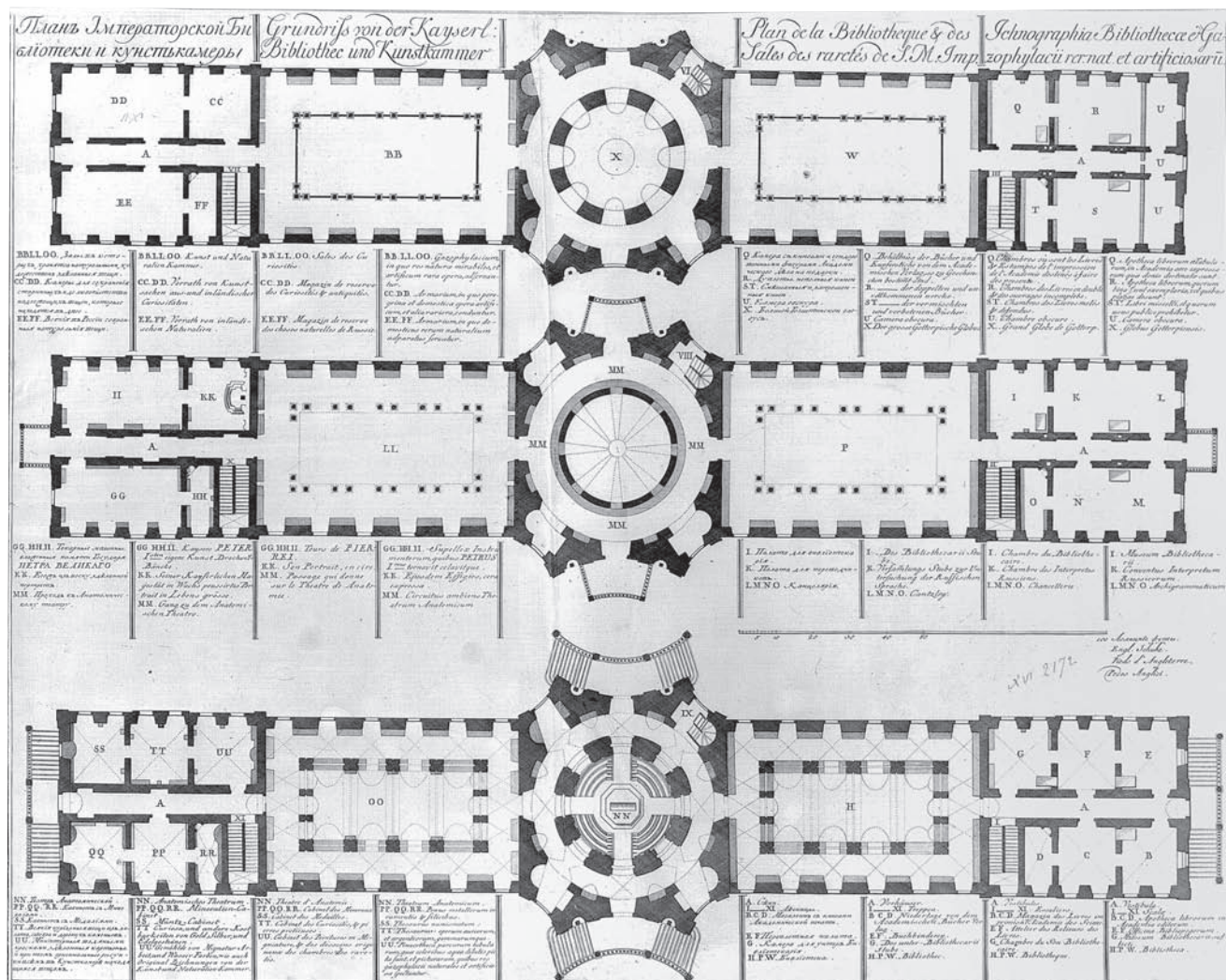
The delimitation of the corpus

As mentioned above, the 2,033 drawings from the *Icones pictæ rerum quæ in Academiæ thesauris insunt* that have been identified to date are kept by three different institutions in St Petersburg. The collection, which we estimate to have originally totalled at least 4,000 sheets, was kept in 58 boxes in one of the rooms (UU) of the *Kunstkamera*. (ill. 4 and 6) Since the nineteenth century it has fallen prey to the urge to specialisation that emerged at that time. The zoological drawings, for example, followed the corresponding animals to the newly estab-

15. Stetskevich 1997.



ill. 3. Title page of the catalogue *Musei Imperialis Petropolitani* Vol. 1 *pars prima* (St Petersburg, 1742)



ill. 4. Ground plan of the Kunstkamera. The Paper Museum was housed in room UU on the first floor (left wing). Engraving from: *Palaty Sankt-Peterbourgskoj Imperatorskoj Akademii Naoek, Biblioteki i Koenstkamery, kotorych predstavleny plany, fasady i profili* (St Petersburg, 1741)

176 TABVLAE PICTAE.

- Nr. 11. Liber artificiosus, in quo Amboinenfes pisces, et cancri rariores, coloribus aqua dilutis ad vitium ab illustri amatore picti sunt. Continet Icones 433.
12. Libellus cartaceus, in quo 73 vexilla nautica subtiliori lumine picta sunt.
13. Nomina, Dignitates et arma Principum et Dominorum, Equitum, Ducum et praefectorum ordinis et militiae, qui vocantur St. Spiritus, a Ludouico XIV. Franciae et Navarrae Rege, capite et supremo Magistro eorum, ab initio regni eius ad hunc diem factorum: vna cum legibus et constitutionibus eius ordinis ab auspice Rege Henrico III. sanctis 1676. fol. mai. Gallice. II. Vol.
14. XXIII. Tab. Insignia prouinciarum et urbium Imperii Russici exhibentes, coloribus aqua dilutis pictae.

ICONES PICTAE RERVM,
QVAE
IN ACADEMIAE THESAURIS INSVNT.

- Nr. 1. 2. Delineationes Architectonicae, Aedum Academicarum et Technophilacii. Vol. I. II.
- 3-5. Icones Figurarum anatomicarum. Vol. I-III.
6. Icones foetuum. Vol. IV.

Nr. 7.

TABVLAE PICTAE. 177

- Nr. 7. Icones monstrorum. Vol. V.
8. 9. Icones quadrupedum. Vol. I. II.
10. 11. Icones auium. Vol. I. II.
12. 13. Icones piscium. Vol. I. II.
14. Icones Amphibiorum. Vol. I.
15. - - - inariorum. Vol. I.
16. - - - serpentum. Vol. I.
17. - - - lacertorum. Vol. I.
18. 19. Icones Insectorum. Vol. I. II.
- 20-22. - - - plantarum singulari artificio, coloribus veris, magnitudine vt plurimum naturalis, in locis natalibus, Capite scil. Bonae Spei, et variis Asiae meridionalis Regionibus, depictarum. Vol. I-III.
23. Icones herbarum, arborum et fruticum, in Promontorio Bonae Spei et variis Indiae Orientalis regionibus crescentium, sedis incertae. Vol. IV.
24. 25. Icones Plantarum in Promontorio Bonae Spei sponte prouenientium, minus artificiosarum, quarum maxima pars exstat in *Leoni Petrii Gazophylacio Naturae et artis* Tab. 81-91., quaedam et in *C. Bochaumii* Centuriis, tertia praecipue. Vol. V. VI.
26. Icones Plantarum ex iisdem locis, minus perfectarum, in quibus aut floris aut fructus figura desideratur. Vol. VII.

Nr. 27.

178 TABVLAE PICTAE.

- Nr. 27. Apographae Icones Plantarum, in promontorio Bonae Spei praecipue crescentium. Vol. VIII.
28. Similium Sinico atramento delineatarum. Vol. IX.
29. Apographae Icones plantarum, quae in centuriis *Bochaumii* editae sunt, cum quibusdam aliis figuris herbarum, orchidum, praesertim in dictis centuriis non extantibus, quas in itinere Constantinopolitano delineari curauit. Vol. X.
30. Icones plantarum et radicum monstruosarum. Vol. XI.
31. Icones miscellaneorum. Vol. XII.
32. - - - mineralium. Vol. I.
33. 34. Icones lapidum. Vol. I. II.
35. 36. - - - Instrumentorum Physicorum et Mathematicorum. Vol. I. II.
37. 38. Icones operum artificiosorum. Vol. I. II.
39. 40. - - - adparatus veltarii. Vol. I. II.
- 41-44. - - - operum Chinesium. Vol. I-IV.
- 45-46. - - - rerum rariores. Vol. I. II.
- 47-49. - - - adparatus pretiosi. Vol. I-III.
50. Icones gemmarum. Vol. I.
- 51-58. Icones nummorum. Vol. I-VIII.

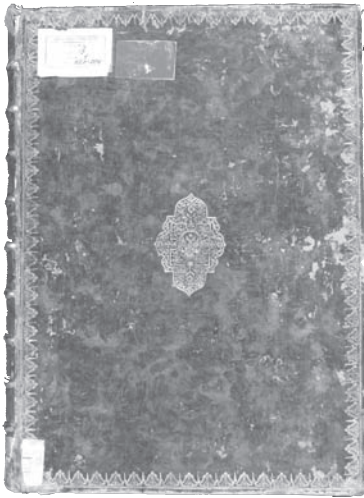
CATA-

ill. 5. The list of 58 boxes as summed up in the catalogue *Musei Imperialis Petropolitani* Vol. II pars prima (St Petersburg, 1741), pp. 176-178

lished Zoological Museum of the Academy of Sciences, before being moved yet again some time later to the Archive of the Academy, where they are still kept. Other groups of drawings came into private hands under circumstances which are far from clear before being returned to the State (see the article by Galina Printseva in this publication). That is true of the drawings of instruments in the Hermitage and of the sheets with drawings of ivory carvings, which are now in the Russian Museum. For some categories of drawings, however, – such as those of the minerals and gems, and of certain kinds of insects, such as butterflies – it has unfortunately not proved possible to trace their present whereabouts.

19 of the 58 boxes listed in the MIP are extant. (ill. 5) Most of the drawings published here are still in their original boxes (several of the 13 boxes in the Archive of the Academy, and all 5 exemplars in the numismatic department of the Hermitage). Only a relatively small number of sheets are kept outside the box for reasons of conservation (one box in the Hermitage, Department of Russian History). Two groups of drawings are kept without any box: those of instruments and tools (Hermitage, Department of Russian History), and the sheets mainly representing artistic objects, including ivory (Russian Museum). That they originally formed a part of the *Icones pictæ* can be ascertained from their inscriptions with references to the MIP and to the fact that they entered these museums as a group. While the first group will undoubtedly have been kept in one of the boxes that have by now disappeared with *Icones instrumentorum physicorum et mathematicorum*, the second group probably consisted of sheets from the boxes with *Icones operum artificiosorum* and *Icones rerum rariorum*, as can be seen from a comparison with the rubric titles under thirteen extant boxes in the Archive of the Academy contain the *Icones operum Chinsium* (3 boxes), the *Icones apparatus vestiarii* (2 boxes), and the *Icones quadrupedum*, *Icones serpentum*, *Icones lacertiorum*, *Icones piscium*, *Icones avium*, *Icones plantarum* and *Icones rerum rariorum* (1 box each), plus a box with an illegible title containing all kinds of drawings of animals. The other six boxes (now in the Hermitage) contain the *Icones nummorum* (5 boxes) and the *Icones apparatus pretiosi* (1 box).¹⁶

The lack of the other 36 boxes with their contents does not mean that a further search would be pointless. Exemplars will probably turn up somewhere one day. It is also possible that, as in the case of the drawings of instruments and ivory carvings, more drawings have become detached from their boxes and are circulating, either among private collectors or within the collections of government institutions



ill. 6. One of the 58 boxes in which the drawings were kept

16. The titles on the boxes consistently use the genitive form *Iconum* because of the addition of the nominative *Volumen* followed by a number. See Appendix 3.

in Russia or abroad. For instance, it is known that Catharine the Great was very fond of precious stones; perhaps a search in the documents relating to her might bring to light some of the missing drawings of gems. It is also a fact that the Archive of the Academy houses not only the drawings presented here but also many more drawings of naturalia and artificialia, a number of which may have had a place in one of the (extant or no longer extant) boxes and may therefore have formed a part of the paper museum. This may have been the case with the drawings of plants and animals that were made during the Second Kamchatka Expedition of 1733-1744. For instance, a number of drawings of fish are preserved in the papers of Johann Georg Gmelin, one of the participants in this expedition, which may well have originally formed a part of the *Icones pictæ*.¹⁷ Given the lack of certainty on this score, however, we have decided not to include such drawings. The catalogue presented here is intended as a provisional catalogue that can later be supplemented on the basis of further research.

17. E.g. SPBARAN, f. 1, op. 105, no. 25, 2-4. The drawings are signed by Johann Christian Berckhan. See fig. 91 in Exh. cat. Halle 1996, where several birds and plants are also reproduced.

The importance of the drawings

The drawings are of enormous importance in terms of cultural history, both individually and as a corpus. They constitute a rich source of knowledge in the field of the history of collections and of science, as well as providing us with information about the state of (scientific) drawing in Russia in the first half of the eighteenth century. Their importance for the history of collections is of two kinds. On the one hand, the drawings can be used to determine the provenance of certain objects that are still kept in the Russian museums (see the work of Oleg Neverov). On the other hand, the drawings enable us to reconstruct the original composition of the collection of the Academy of Sciences, particularly where lost objects are concerned, such as those which were destroyed in the fire of 1747. That would be a much more difficult task if we had only the MIP at our disposal. The MIP does list all the objects with a brief description in Latin, but without the illustrations it is often difficult to identify them precisely in terms of country or region of origin, and (in the case of artificialia) of date of production and function. Comparison with the drawings has shown the information in the MIP to be incomplete or incorrect in some cases – mistakes that can be historically revealing in themselves. For instance, in the case of the ethnographic objects the reference to their function or provenance is often erroneous by modern standards. This raises questions about, for instance, the methods of recording used by

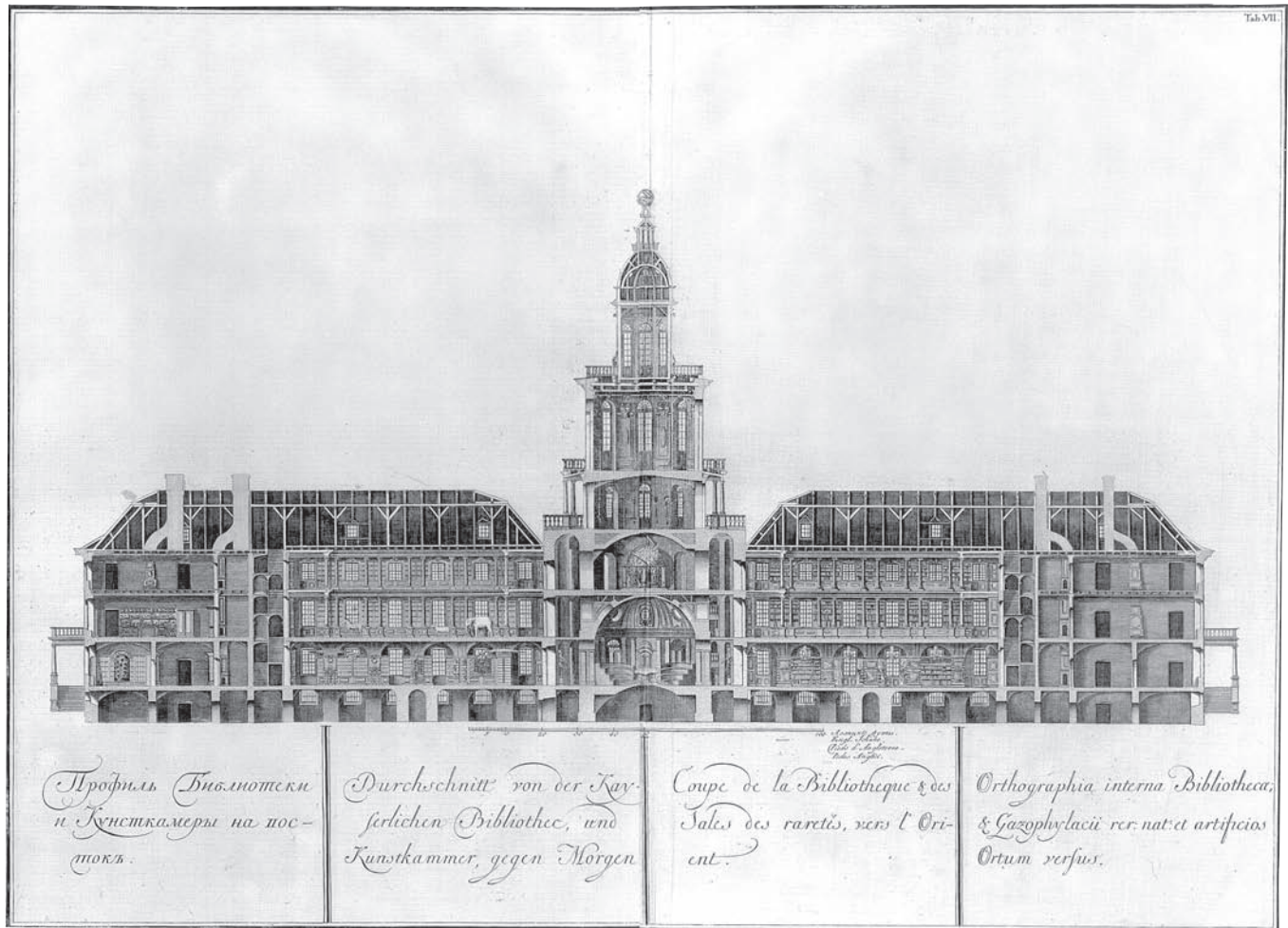
the members of the expedition and about the communication between them and the compilers of the catalogue.

Not only do the drawings enable us to form a better picture of the composition of the collection, but they also make it possible to reconstruct the actual arrangement of the *Kunstkamera*. It is crucial in this respect that the MIP lists the objects in the order in which they were displayed. A start in this direction has been made by Bert van de Roemer, who (elaborating on the work by Russian researchers and by Jan van der Waals) has not only tried to match the drawings with the MIP, but has also compared them with a third source: a publication of prints containing a number of ground plans, cross-sections and frontal elevations of the interior of the *Kunstkamera* – the *Palaty Sankt-Petersburgskoy Imperatorskoy Akademii nauk Biblioteki i Kunstkamery*, published by the Academy in 1741/1744.¹⁸ (ill. 7)

18. 'The Chambers of the St Petersburg Imperial Academy of Sciences, the Library and the Kunstkamera'. Meijers and Van de Roemer 2003.

As for the history of science, the drawings are at least as informative. First of all, their production is a sign of the lively activity that was developed in the course of these few decades to put Russia on the scientific map of Europe. The drawing project shows that there was an awareness of the great importance of visual material and that it was centred on the tradition of collections of drawings, print editions and illustrated scientific publications that had existed in the rest of Europe for centuries (see the contribution by Debora Meijers). An investigation of how the drawings were used and for what purposes can offer insight into the production of books by the Russian Academy of Sciences (see the contribution by Natalya Kopaneva). Moreover, the drawings are evidence for the level of development of the various sciences in Russia in the second quarter of the eighteenth century. Quality was high in this field: the historian Gerhard Friedrich Müller, the botanist Johann Georg Gmelin, and the anatomist Johann Duvernoi, to give just a few examples, were leading experts in their respective fields. They are the authors of important works, for which they collaborated with the artists of the *Kunstkamera* drawings. There was only a disparity in the sense that they were exclusively non-Russians, but as time went on they were supplemented and replaced by Russians such as the natural historian and ethnographer Stepan Petrovich Krascheninnikov and the natural scientist Mikhail Vassilyevich Lomonossov.

Finally, the production of the drawings in the workshops of the Academy of Sciences is informative for anyone interested in the history of drawing in Russia. Unlike the situation in other European countries, where there was already a long tradition in this area, drawing and painting 'from nature' was still a relatively recent activity in Rus-



sia at the beginning of the eighteenth century. In so far as they were taught and practised, this was done at first by tutors from Western Europe, especially from the Netherlands, who were in the employ of the tsar and practised their art in the arms room of the Kremlin in Moscow, for example. There were no independently operating studios, nor was there an official Academy of Art. This meant that when the Academy of Sciences was founded in 1724, the need was felt to set up a department there for 'the arts' – a series of workshops equipped in a strictly utilitarian way in which not only utilities in glass, metal and

ill. 7. Filipp Mattarnovi, Longitudi-
nal cross-section of the Kunstkamera.
The left wing with the collection of
naturalia and artificialia and the right
wing with the library are connected
in the middle by an anatomy theatre and
an observatory. Engraving from:
Palaty, St Petersburg 1741,
Tabula VII.

other materials but also drawings, prints, maps and books could be produced. This now became the primary institution for teaching art to the younger generation until the establishment of a French-style Academy of Art in 1757. At the risk of exaggeration, one might say that the Western tradition of drawing entered Russia to a large extent by way of scientific illustration. That this process was not without its tensions can be seen from the contribution by Elena Stetskevich.

Themes for further research

The book and catalogue on DVD presented here are intended in the first place as a publication of source material in the hope that this will encourage further research. To begin with, the present publication reveals the gaps in the extant corpus, and we hope that it will prompt further detective work, for example in the archives of Catherine the Great.

In addition, there are a number of themes which we consider to be important, although this is not the place to explore them in more detail. First of all are the botanical drawings, which seem to form an anomaly within the corpus. Unlike the rest of the sheets, which can be connected directly with objects in the collection in about 80% of the cases, the botanical drawings appear to correspond to the (dried) plants in the *Kunstkamera* to only a limited extent. The number of sheets must have been enormous, at least as indicated in the MIP, where no less than eleven boxes are mentioned. We have only been able to identify 361 drawings and one box (Vol. VII) so far (though it is unlikely that these drawings were originally stored in this box). They are probably the contents of Volume x: *Apographæ [= copied] Iconæ plantarum, quæ in centuriis Buxbaumii editæ sunt, cum quibusdam aliis figuris herbarum, orchidum, præsertim in dictis centuriis non extantibus, quas in itinere Constantinopolitano delineari curavit.*¹⁹

It is not unlikely that the other plant drawings, probably hundreds of them, have been absorbed by the collections of the Archive and the Botanical Institute of the Academy of Sciences, but it is also possible that they have passed into other hands. One of the reasons why it may be interesting to try to locate them is the region they represent. After all, anyone who goes through the list with boxes in the MIP will be struck by the recurrence of references to *Promontorium Bonæ Spei*, the Cape of Good Hope, in connection with no less than nine of the eleven boxes. This is remarkable because the same MIP makes no mention of the presence of plants from the Cape in the *Kunstkamera*, so

19. The reference is to Johann Christian Buxbaum, *Plantarum minus cognitarum centuria I(-v) complectens plantas circa Byzantium & in Oriente observatas*, St Petersburg 1728-1740, one of the first productions by the Academy press. See the contribution to the present publication by Andrey Sytin.

that this group of drawings within our corpus does not represent objects in the collection (at least as it was in 1741, the year of publication of the corresponding part of the MIP), but supplements them. How is this anomaly to be accounted for? It should be realised that the botanists in the Academy were not working on South Africa, at least not during their stay in St Petersburg. How did these sheets find their way there to be put in storage among the other boxes?

There are some clues. For instance, in one case the MIP refers to the London apothecary and collector James Petiver in the titles of two boxes: *Icones Plantarum in Promontorio Bonæ Spei sponte provenientium, minus artificiosarum, quarum maxima pars exstat in Iacobi Petiverii Gazophylacio Naturæ et artis Tab. 81-91., quædam et in C. Buxbaumii Centuriis, tertia præcipue* (Vol. v and vi). This reference takes us to Great Britain, and from there it is a small step to Johann Amman, the botanist who exchanged his position as assistant to the famous physician and collector Hans Sloane for a chair at the Academy in St Petersburg in 1733. It is known that Sloane had South African material from the collections of James Petiver, the Dutch collector Paul Hermann and others, and that Amman took all kinds of objects with him and had them sent on to his new address in Russia. We also know that, after his death on 4 December 1741, the Academy purchased his herbarium and plant drawings.²⁰ Although the purchase took place in 1743, whereas the volume of the MIP listing the boxes dates from 1741, it is possible that Amman's possessions were already kept in the *Kunstkamera* in that year (while he was still alive). The hypothesis that the drawings of plants from the Cape are his, and belonged to Sloane before then, should be pursued further.

A second theme that calls for further research is the role played by Maria Dorothea Gsell in the creation of the *Icones pictæ*. It is regrettable that no signed drawings have been found by this daughter of Maria Sibylla Merian, who came to St Petersburg at the invitation of Peter I in 1717. All the same, more can be said about her contribution than seemed possible until a short time ago. It is certain, at any rate, that Maria Dorothea coloured the engravings in the publication of Johann Christian Buxbaum (see note 19). Circumstantial evidence, however, suggests that she was responsible not only for colouring the engravings but for the drawings on which those engravings were based as well. During the period 1726-1727, when this publication was in preparation, there was no other professional plant illustrator working in the Academy besides Maria Dorothea. And that is not all. The French traveller Aubrey de La Motraye, who recorded his visit to St Petersburg in 1726, did not fail to record his observations in the

20. SPBARAN, doc. 81, pp. 139-188; doc. 90, pp. 225-227.

21. Aubrey de La Motraye, *Voyages en divers provinces*, The Hague 1732 (2nd ed.), pp. 245-246.

22. Lebedeva 1996.

Kunstkamera and its library, where Schumacher had shown him, among other items, Maria Sibylla Merian's richly illustrated *Metamorphosis insectarum et plantarum surinamensium*.²¹ De La Motraye, who 'had not written down the title', attributed it from memory to 'Sebastien Merian'. But it is above all the continuation of his text that is illuminating. He notes that he had been shown a great diversity of wonderful drawings of plants and animals by 'Madame Merian', which were to be engraved for 'a certain treatise that was ready to be printed'. He is probably mistaken here too, for there was no question of a publication with prints based on drawings by Merian in that year. Moreover, the original Merian drawings did not enter the *Kunstkamera* until 1728, that is, two years after de La Motray's visit.²² The only natural historical book that was in preparation in 1726, as we have seen, was Buxbaum's two-volume publication, which would eventually be illustrated with 60 plates in the first volume and 50 in the second. Might the Frenchman have seen the drawings for *that* book and, having been told that Merian's *daughter* was the artist, confused the daughter with the mother? This is worth looking into, particularly with a view to Maria Dorothea's contribution to the genesis of the paper museum, but within a wider context the filling in of this blank spot could also be of interest for the history of the Merian family of artists, printers and publishers by extending it to include the Russian period that commenced in 1717.

If this publication leads to such further research, we consider our purpose achieved. It would be splendid if the missing drawings were to be found to make this eighteenth-century 'image bank' available again in its entirety, but even in its present form, this inventory offers something essential that would not be possible with just the (far less numerous) objects that have been preserved. It presents a multi-faceted visual picture of the composition of the original collection of the Academy of Sciences in St Petersburg. That in turn creates the possibility of comparing this institute and its museum with similar institutes in the rest of Europe in a more rigorous and thorough manner than has hitherto been possible.

THE PAPER MUSEUM
AS A GENRE

*The corpus of drawings in
St Petersburg within a European
perspective*

Debora J. Meijers

In order to gain insight into the functions of the fifty-eight boxes with ‘Icones pictæ rerum, quæ in Academiæ thesauris insunt’, as they are summed up in the catalogue of the *Kunstkamera*,¹ it is not enough to confine our attention to their genesis in St Petersburg without taking into account the conventions regarding such paper museums that prevailed in other parts of Europe. After all, in spite of the scale of the drawing activities in St Petersburg and the unusual nature of the organisation of the workshops where they were produced,² this is not an isolated case.

This contribution deals with the characterisation of the paper museum in St Petersburg in the light of more or less similar projects elsewhere in Europe. Large collections of pictures intended to represent real objects had been formed already in the sixteenth century, at least in Italy, Germany and the Netherlands, connected with such figures as the Bolognese naturalist Ulisse Aldrovandi (1522–1605), Emperor Rudolf II (1552–1612), the lawyer Cassiano dal Pozzo (1588–1657) in Rome, and the Amsterdam mayor and governor of the Dutch East India Company Nicolaes Witsen (1641–1717). These examples show that it was not uncommon for scientists, aristocrats, princes and private individuals to collect a considerable quantity of drawings of minerals, plants, animals and artefacts. Moreover, they immediately confront us with the fact that there were different types of paper museums. While the drawings of Aldrovandi, dal Pozzo and Witsen represented objects that they sometimes did but often did not actually possess, and in that case represented a virtual collection, in the case of Rudolf II we can speak of a rudimentary form of a collection that was represented *as a collection* – as his *own* collection, of course. The present article is primarily concerned with the latter variant, which reached maturity in St Petersburg.³

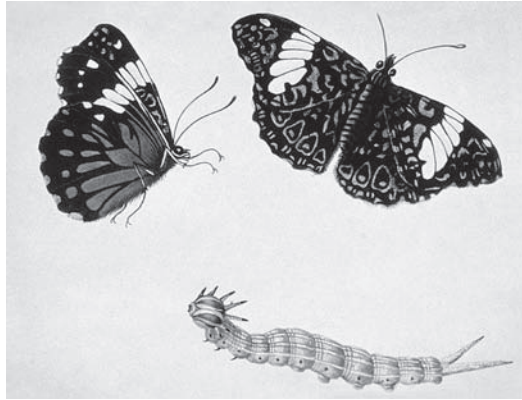
To gauge the importance of the corpus of drawings in St Petersburg, it is worthwhile to chart this variant, in other words, to examine to what extent other European collections were recorded in drawings or prints between roughly 1550 and 1750 and whether patterns can be detected among these individual cases. Strangely enough, such an inquiry has never been conducted before. There are various studies of separate cases, but no analysis of these folders, boxes and bundles of visual material *as a genre* has been made.⁴ The present contribution is therefore bound to be no more than a first essay, without laying any claim to completeness, but carried out in response to a specific question: does such a European survey, irrespective of its inevitable selectivity, offer us more insight into the corpus of drawings in St Petersburg?

1. ‘Painted images of the objects that are in the collection of the Academy’, *Musei Imperialis Petropolitani* (hereafter referred to as MIP) Vol. II, *pars prima*, St Petersburg 1741, pp. 176–178. For the list of the fifty-eight boxes mentioned there and a general indication of their contents see Appendix 2.

2. See the contribution to the present publication by Elena Stetskevich.

3. This practice is already documented in a religious context from around 1520. For instance, Lucas Cranach’s woodcuts in the Wittenberger *Heilthumsbuch* illustrate the collection of relics of the princely house of Saxony (Zimmermann 1929). With thanks to Rob Scheller for this information. As such sketches and prints were made and used in a different context (they were intended for pilgrims, not for the promotion of the arts and sciences), they will be left out of the present discussion.

4. The Museo Cartaceo of Cassiano dal Pozzo has been the object of study and publication by an international research team since the late 1980s. See Haskell *et al.* 1996; Freedberg 2002. The Helmholtz-Zentrum für Kulturtechnik of the Humboldt University in Berlin is preparing a database of, among others, Aldrovandi’s drawings. There are also several studies of genres of publications that, as we shall see, are connected with the paper museum: the album with a selection of the highlights of a collection and the (illustrated) museum catalogue. See Stübel 1925, Balsiger 1955 and 1970, Exh. cat. Munster 1976, Ketelsen 1990, Georgel 1994, Schnapper 1995.



ill. 1. Maria Sibylla Merian, Leaf from an album with metamorphoses of insects, 1683-1713. Watercolour on parchment, 320x225. Library of the Russian Academy of Sciences, St. Petersburg branch, inv. no. F. 246

Although the present study of the paper museum in St Petersburg is primarily concerned with loose-leaf drawings of the separate objects in the *Kunstkamera* collection, a proper understanding of them requires us to include other forms of representing the objects in a collection (as a collection) within the investigation: the illustrated catalogue or guide and the sketched or printed leaves that present the well-stocked walls of a cabinet or gallery. As we shall see, there are functional links between these different kinds of visual material. In addition, despite the difference in purpose, some attention must also be paid to the type of paper museum mentioned above that represented not a real but a virtual collection of objects. Every respectable *Kunst-kammer* had a section of this kind, which was intended as a supplement on paper to the actual collection of material objects. The *Kunst-kamera* of the St Petersburg Academy of Sciences was no exception in this respect – it included the large collection of watercolours and books by Maria Sibylla Merian, for instance, as well as the profusely illustrated printed catalogue that Albertus Seba had made of his (second) collection (ill. 1 and 7). Furthermore, the library, which was housed in the same building as the *Kunstkamera*, contained many other illustrated books that were connected with this virtual variant of the paper museum genre, particularly natural histories, technical treatises, encyclopædia and geographical descriptions. The boxes with ‘Icones pictæ’ were a link between these other types of visual material.

For the purposes of the present investigation, a division has been made into these three categories of paper museums to enable us to analyse the terrain as well as to spot any interrelations between them. To recapitulate, they are: the supplement to or substitute for a collection of objects (the virtual paper museum); the representation of objects in an existing collection, sometimes resulting in an edition of prints or an

illustrated catalogue (the real paper museum); and the representation of the interiors or walls of cabinets and galleries.

These three categories have enough common and dissimilar features to be considered as variants of an overarching genre – the paper museum – that can be described as the visual collection, whether sketched or engraved, loose-leaf or bound, with or without accompanying text, compiled by a collector or institution to represent a real or virtual collection of objects.

The following text offers a sketch of the image that emerges when we confront the corpus in St Petersburg with a survey of paper museums in the wide sense of the term as indicated above. By viewing the *Kunstkamera* drawings in this way from the perspective of a European genre of visual material, we may obtain more insight into its shared characteristics and into the specific ones connected with the situation in Russia.

The result of the research presented here is a surprising one. Although the collecting and sketching traditions that had been developed earlier elsewhere in Europe only got off to a hesitant start in Russia in the second half of the seventeenth century, the measures taken by Peter the Great not only caught up with them, but also unleashed a wave of activity that was without precedent in terms of tempo and ‘band-width’. This activity was continued after the death of Peter in 1725 in spite of all the political developments, changes of direction, conspiracies and coups d’état.⁵ Although the city of St Petersburg had barely been in existence for twenty-five years, a large body of visual material was produced within the space of a couple of decades by a team of Dutch, German and later Russian draughtsmen and engravers within the recently founded Academy of Sciences and the corresponding *Kunstkamera*. What is particularly striking is that the intention was apparently to cover the complete field of all of the categories distinguished above – a form of ‘pulling out all the stops’ that is not found anywhere else in Europe. The real paper museum alone in fifty-eight boxes that is the subject of the present volume must have originally consisted of at least four thousand leaves.⁶ Subsequently production began in the late 1740s of prints based on these drawings, probably a project intended to publish the highlights of the *Kunstkamera* or an illustrated catalogue which, for as yet unaccountable reasons, never got past the stage of the engraving, printing and colouring of twenty-six plates.⁷ Finally, the interior of the museum building and the arrangement of the objects in the cupboards is documented in a number of drawings and prints. This was all produced against the background of a large volume of visual material from

5. Six tsars and tsarinas ruled Russia in the period under discussion: Peter the Great (1682-1725), Catharine I (1725-1727), Peter II (1727-1730), Anna Ivanovna (1730-1740), Anna Leopoldovna (regent during the reign of her infant son Ivan VII in 1740-1741), and Elizabeth (1741-1762). The years 1740-1743 were particularly turbulent, with two coups d’état in one year after the death of Anna and a conspiracy against Johann Daniel Schumacher that led to his suspension as head of the chancellery of the Academy from 1741 to the end of 1743.

6. If we assume approximately seventy leaves per box and a total of fifty-eight boxes (as stated in the MIP of 1741), we arrive at a total of around four thousand. However, after the appearance of this part of the catalogue the sketching activities continued down to 1756. The possibility therefore cannot be ruled out that there were additional boxes or that leaves were stored outside the boxes.

7. See note 55.

elsewhere that had by now come to rest in the *Kunstkamera* and the library.

In order to arrive at a better assessment of the European embedding of the fifty-eight boxes with ‘Icones pictæ’, the corpus will now be examined in terms of the three closely interrelated categories defined above.

THE VIRTUAL PAPER MUSEUM AS SUPPLEMENT TO OR SUBSTITUTE FOR A COLLECTION OF OBJECTS

Almost all collectors attach importance to making objects that they do not actually possess available by means of illustrations. Such collections of images that served as supplements or substitutes could be found from roughly the middle of the sixteenth century, particularly in the hands of physicians and apothecaries or polymaths, but also among administrators and at courts where serious research was conducted on the (natural) sciences.

A well-known example is the collection of images that Cassiano dal Pozzo (1588-1657) built up in his house in Rome.⁸ It was composed of more than seven thousand watercolours, sketches and prints of objects that he did not himself possess: minerals, plants and animals, as well as sculptures and other antiquities, buildings and architectural decoration, such as the early Christian mosaics of Rome. He often commissioned the sketches himself,⁹ but the collection also accommodated existing material, such as the *Syntaxis Plantarum*, the archive of botanical drawings put together by the noble and scholar Federico Cesi, which dal Pozzo acquired after the death of Cesi in 1630.

Cassiano dal Pozzo, who was in the service of the cardinal Francesco Barberini and was a member of the Accademia dei Lincei, the scientific society set up by Cesi, can be characterised as a polymath who was in contact with many like-minded individuals in Italy and abroad. The illustrations functioned as study material in that context. The final goal that the collector had in mind was to own a comprehensive visual encyclopædia.

While in the case of dal Pozzo the term ‘museo cartaceo’ was of his own invention, in most other cases the naming of the collections of visual material is not documented. We should therefore be wary of characterising every collection of drawings of unowned objects as a virtual paper museum. Our primary concern here is with the collection of images that has undergone a certain ‘museification’ and is thus more than just a collection of instrumental material. After all, all scientific research on tangible objects was accompanied by sketches

8. See Haskell *et al.* 1996; Freedberg 2002.

9. Dal Pozzo employed Nicolas Poussin, Pietro da Cortona, Pietro Testa, Antonio Eclissi, Vincenzo Leonardi and others for this purpose.

of those objects. Moreover, every woodcut and engraving used as a book illustration was preceded by sketches, which were sometimes kept after the printing of the publication. If we were to include all such drawings, the title 'museum' would lose all meaning. If a group of drawings is to be characterised as a paper museum, it must be more than just a group of drawings. There must at least be a deliberate policy of conservation, which means that there has to be a demonstrable added value after the original function in the process of research or publication to which the drawings owed their existence. This is not always easy to determine. For instance, is the fact that more than fifteen hundred drawings and watercolours of plants, flowers and fruit have been preserved from the collection of the Swiss naturalist Conrad Gessner¹⁰ an indication of his desire to build up a visual collection, or is it simply due to the fact that his death in 1565 prevented him from completing the book on botany that he had commenced? Would he have kept the drawings tidily after the publication of the book, or would they have disappeared sooner or later, as happened in so many other cases?

In short, in the case of such groups of sketches it is not always easy to draw the dividing line between the function of instrumental material for research, of preliminary drawings for book illustrations, and of substitute collection. This is particularly true of those cases in which the researcher who had made them was also the keeper; their 'museification' often only emerges clearly at the time of the succession of a new owner. An example of this is provided by the watercolours and manuscripts of Maria Sibylla Merian that Tsar Peter I and his physician Robert Areskin purchased in Amsterdam in 1717. When they had belonged to the inventory of Merian herself, they had borne witness to her daily activity as researcher and artist, or in certain cases they had formed material for sale. However, once they had been transferred to the Russian collection, and especially after their inclusion in the *Kunstkamera* of the Academy of Sciences, they acquired the status of forming a part of a (virtual) paper museum.¹¹

A much older example is also interesting in this connection. It concerns the enormous collection of images that the Bolognese natural philosopher Ulisse Aldrovandi began to build up in the 1560s alongside the naturalia and (smaller collection of) artificialia that he owned. The drawings were used as study material and as the basis for the illustration of his books on every area of the animal world and on parts of the plant and mineral worlds.¹² That Aldrovandi regarded the sketches and prints not only as research material but also as a collection that was worth keeping in its own right can be seen from the fact that he

10. Library of the University of Erlangen. See Nissen 1951, vol. 1, p. 57.

11. MIP Vol. II, *pars prima*, 1741, pp. 174-176. The sketches were thus not stored in the library but in the *Kunstkamera*. Lebedeva (1996, p. 64) draws attention to the fact that Areskin had already decided to store his Merian drawings in the same way: as objects with an artistic value and as illustrations of natural objects, which thus belonged with the artificialia and naturalia rather than with the books.

12. The collection, which is still extant, consists of 2,383 gouaches by such artists as Giovanni Neri, Jacopo Ligozzi and Cornelius Schwindt, bound in seventeen bundles, and almost three thousand woodcuts based on those gouaches.

13. Library of the University of Bologna. Exh. cat. Paris 1997, p. 292, no. 50; Olmi 1976.

14. U. Aldrovandi, *Opera Omnia*, 13 vols., Bologna, 1599-1668. On Peter's own purchase and on Seba see Driessen 1996, p. 73. On Areskin see Appleby 1983, p. 392. On Bruce: Savel'eva and Kopanav 1989, p. 4.

15. *Horti medici Amstelodamensis rariorum tam Africanarum, quam utriusque Indiæ, aliarumque peregrinarum plantarum [...] descriptio et icones [...]*, Amsterdam 1697 (vol. I; Johannes Commelin), 1701 (vol. II; Casparus Commelin). M1P Vol. II, pars prima, 1741, p. 179, no. 2 only mentions vol. I. See also notes 43, 46 and 57.

16. See the introduction by Anna Radzyun in this publication. The Kamchatka expedition, which lasted from 1733 to 1743, was led by Vitus Bering. Its main purpose was to determine whether the continent of Asia was connected to America in the extreme northeastern region of the Russian empire. A contingent of scientists was also sent by the Academy to investigate and document the geography, history, peoples, plants and animals of the territories traversed. They were: the botanist Johann Georg Gmelin, the historian Gerhard Friedrich Müller, the astronomer Louis De l'Isle de la Croyère and the all-round natural scientist Georg Wilhelm Steller. They were assisted by the draughtsmen Johann Christian Berckhan, Johann Wilhelm Lürzenius, and Johann Cornelius Decker. See Exh. cat. Halle 1996.

donated it, together with his other collections, to the city of Bologna in 1603, two years before his death, with the instruction to continue the publication of his work.¹³ It is debatable whether the scholars in St Petersburg were familiar with this original material, but they certainly knew the books that resulted from it. A number of volumes of Aldrovandi's published works, with a wealth of woodcut illustrations based on the relevant drawings, were purchased by Peter the Great in Leiden. Others found their way to the *Kunstkamera* with the collection of Albertus Seba in 1716, with the library of Peter the Great's physician Robert Areskin in 1719, and with that of Jacob Bruce, a high-ranking army officer and, like Areskin, an important collector, in 1737.¹⁴

Years before the Academy of Sciences was founded in St Petersburg in 1724 and began to employ draughtsmen to record the objects in the *Kunstkamera*, there was thus already a collection in the making, comprising sketches, prints and illustrated books purchased abroad, that can be considered as a virtual museum presented in images. Many other examples could be cited besides those of Merian and Aldrovandi – including prints dealt with below under the heading 'real paper museums', but which by virtue of their incorporation in the collection in St Petersburg came to form a part of the virtual paper museum there. For instance, one cannot overlook the illustrated work on the *Hortus Botanicus* in Amsterdam, published in 1697-1701, and the two volumes with reproduction of paintings owned by Louis XIV, the *Tableaux du Cabinet du Roi* of 1677.¹⁵ This type of visual material not only widened the scope of the composition of the collection, but also enriched it by linking it with the names of famous researchers and powerful rulers.

Besides this material from elsewhere, the archive of the Academy of Sciences kept the sketches produced by and for its members and supplemented the *Kunstkamera* with representations of research activities and of objects that were too ephemeral to be capable of preservation in their original condition. These include sketches done during special anatomy sessions, such as the dissection of a lion and an elephant, or the field sketches made during the expeditions to Kamchatka and elsewhere.¹⁶ These practices naturally followed the European traditions that already existed in these fields and which were documented in word and image in the library. Thus the library contained not only books by Maria Sibylla Merian but also publications by Georg Markgraf and Willem Piso, the scientists and artists who had worked for Johan Maurits van Nassau-Siegen in the 1640s during the latter's period as governor of the Dutch colony in Brazil. These

publications had also found their way into the Academy library along with the books of Robert Areskin. It further contained a group of copies based on Markgraf's drawings, probably purchased in Amsterdam on Areskin's initiative during his stay with the Tsar there in 1716-1717.¹⁷

So the construction of a virtual paper museum followed not only the practices of individual scientists in the rest of Europe but also the collecting behaviour of administrators and rulers. Collections, including the collections of drawings that concern us here, had already acquired a dynastic and political dimension in the sixteenth century. The Habsburg dynasty was in the vanguard in this respect. Emperor Maximilian I planned to document 'everything' in his empire, whether it concerned fishing and hunting or weaponry and tournaments. This resulted in the first decades of the sixteenth century in a number of volumes of drawings.¹⁸ Towards the end of the sixteenth century some of these books found their way into the collection of Maximilian's great-grandson, Archduke Ferdinand, in Schloss Ambras just outside Innsbruck, where they were given a place in the *Kunstammer* alongside the paintings of birds, fish and other animals that Ferdinand himself commissioned.¹⁹

At about the same time Rudolf II had a large quantity of botanical and zoological drawings made in his court in Prague. For our purposes two albums are especially interesting because they can be characterised as a hybrid of a virtual and a real paper museum. These are the so-called *Museum of Rudolf II*, dating from around 1600: two volumes with 179 oil paintings on parchment depicting both living and dead animals and animal parts.²⁰ In many cases they were in the possession of the emperor himself. For instance, there is a painting of the foot and a piece of the hide of a rhinoceros, together with a rhinoceros horn and a goblet made from the same material, all illustrated on the same sheet. An important indication that the objects were presented as objects in a collection is the presence of the green table on which the objects lie in this and a number of other cases. Parallels can also be regularly drawn with the animals mentioned in the inventory of Rudolf's property drawn up in 1607-1611.²¹ In the context of a collection of sketches intended to supplement a collection of real objects, we are here first confronted with the phenomenon of a collector's very deliberately wanting to represent his collection *as a collection*.

Of less importance in the eyes of Rudolf was the demand for dynastic images that was to be seen in the case of Emperor Maximilian I and later monarchs. This sort of material, that was intended to confirm the rule of the prince for contemporaries and posterity, had come to form

17. Appleby 1983, pp. 388-389; Boeseman *et al.* 1990. These 145 watercolours based on the originals in the Bibliotheka Jagiellonska, Cracow, are kept in the St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN).

18. Maximilian I 1459-1519. Exh. cat. Vienna 1996, p. 137.

19. Ferdinand II 1529-1595. Exh. cat. Vienna/Innsbruck 1995, pp. 17, 65-66: paintings on parchment, now attributed to Giorgio Liberale. According to Irlich, this project was intended 'um die Kunstammer mit der ganzen Tierwelt des Wassers, der Erde und der Luft nach dem Wissenschaftsideal einer vollständigen Zoologie zu komplettieren' (Exh. cat. Vienna/Innsbruck 1995, pp. 67-68).

20. Österreichische Nationalbibliothek, Codex. Min. 129 and 130. The title *Museum of Rudolf II* dates from the nineteenth century.

21. A number of the paintings are attributed to Dirck de Quade van Ravesteyn, while the name of Daniel Fröschl, keeper of the imperial *Kunstammer* and probably the compiler of the inventory, is also mentioned. Hendrix 1997, pp. 162-163. See in particular Vignau-Wilberg 1990.

22. Jansen 1993, pp. 60-62, 65.

a standard ingredient of princely collections. That norm was emphasised once again by the model for an ideal *Kunstammer* that Samuel Quiccheberg drew up for Duke Albrecht v of Bavaria.²² The title of Quiccheberg's treatise, *Inscriptiones vel Tituli Theatri amplissimi* (Munich 1565), already indicates that a good collection should cover both objects and images: 'Inscriptions or titles of the most rich theatre, covering the separate materials and excellent illustrations of everything in the universe [...]'. Those illustrations are to be found in the first and last categories ('classes') of Quiccheberg's system; the former reserves an important place for documentation of the dynasty and the territory of the monarch in question: his family tree, maps of his territory, illustrations of campaigns, sieges, naval battles etc., spectacles, festivities and ceremonies, large paintings of native fauna in particular, and – classified among the illustrations in their quality as reproductions – scale replicas (of cities, buildings and fortresses) and models (of ships, bridges, etc.).

The fifth and final category is reserved for oil paintings, watercolours, drawings and prints, which are of importance for their artistic value (the paintings) or as a supplement (the watercolours, drawings and prints) to the minerals, plants, animals, coins and medals, epigraphs and works of art incorporated elsewhere in the collection. The drawings and prints, classified in terms of the objects represented, very clearly form a paper museum in the virtual sense of the word. As images, they compensated for those objects that could not be acquired or preserved intact. That is the function that can still be seen almost two centuries later in the *Kunstkamera* in St Petersburg in the form of a section for paintings, watercolours and illustrated books.²³ There too we find traces of the function of documenting the territory. Two catalogue entries under books and albums 'in quibus archetypæ picturæ continentur' (that is, the category of volumes 'with original drawings and paintings' that otherwise consisted mainly of the work of Maria Sibylla Merian mentioned earlier) refer to plates with family, city and provincial devices. This was also a West European type of visual material, that Peter the Great introduced to assist in the task of restructuring the social and geographical relations in the Russian Empire.²⁴ Examples were required for that as well, and so it is not surprising to find entry 13 refer to plates with devices of the nobility under the French monarch Louis XIV. It is followed by an item, the last in this category, that is described as 'XXIII. Tab. Insigna provinciarum et urbium Imperii Russici exhibens, coloribus aqua dilutis pictæ'.²⁵

We are therefore more or less bound to conclude that Peter the Great and his advisers were introduced early on to the tradition that

23. MIP Vol. II, *pars prima*, 1741, pp. 153-180 comprises successively a 'Catalogus tabularum pictarum,' an 'Index librorum, in quibus archetypæ picturæ continentur,' followed by our 'Icones pictæ rerum, quæ in academix thesauris insunt,' and finally a 'Catalogus librorum, in quibus ære expressæ tabulæ coloribus quoque ornatae sunt'.

24. Cracraft 1997, pp. 258-266.

25. MIP Vol. II, *pars prima*, 1741, pp. 174-176.

the *Kunstammer* and library of a self-respecting monarch should include a rich collection of visual material. At any rate, they came into contact with it through the proposals for the organisation of the arts and sciences in the Russian Empire with which the philosopher and diplomat Gottfried Wilhelm Leibniz had been bombarding the Tsar since 1697. Still, it was not just this princely tradition that was Peter's source of inspiration. Research on his scientific and artistic policy has shown that, in striving to match other rulers, the Tsar was strongly influenced by the traditions that had developed in the Dutch Republic.²⁶ The name of Maria Sibylla Merian has already been mentioned, but we should also take into account the many collections of drawings, prints and maps that could be found in the Republic, such as the atlases of Laurens van der Hem and Michiel Hinloopen.²⁷ An important link between Russia and the Republic, with its economic and scientific activity and its numerous collectors, was the mayor of Amsterdam and one of the administrators of the Dutch East Indian Company, Nicolaes Witsen (1641-1717). He had spent some time in Russia and was a major authority on the geography and the different languages and cultures of that country. Moreover, he owned not only a collection of *naturalia* and *artificialia* from Siberia, China, the East Indies, South Africa and other regions, but also an extensive atlas with maps, botanical and (what we would now refer to as) ethnographic drawings, which he ordered from the Dutch who travelled to those parts. His correspondence and his scientific publications show how objects and illustrations could be used to complement and throw further light on one another; in a number of cases he possessed both the object and a drawing that documented the use of that object.²⁸ The reproductions of Witsen's Siberian jewellery in his book *Noord en Oost Tartaryen*²⁹ will certainly have had an effect on the decision to collect and to sketch objects of this kind in St Petersburg. (ill. 2 and 3) Peter the Great knew Witsen well and had the book in his possession.³⁰

Parallel to this active practice, there were authors after Quiccheberg too who made theoretical pronouncements on the desirability of a supplementary collection of drawings in a *Kunstammer*. Towards the end of the seventeenth century Johann Daniel Major, a physician and professor at the university of Kiel, likewise recommended the production of visual documentation as a supplement or substitute. In fact, he wrote in his guidelines for collectors, a large 'Raritätenbuch' should be compiled with watercolours of all the known rarities in the world 'at the expense of the government' in order to create an ideal *Kunstammer* that was not bound by the physical limitations that confine every collection.³¹ What is more, reproductions can help in

26. Exh. cat. Amsterdam 1996.

He had been preceded in this by, among others, Friedrich Wilhelm, the Great Elector of Brandenburg. Nissen 1951, vol. 1, pp. 78-80.

27. An atlas is 'a private collection of maps and topographic illustrations, possibly combined with series of portraits of monarchs, military officers and scholars, mythological scenes, costumes, and images of plants and animals'. Van Gelder in Exh. cat. Amsterdam 1992b, p. 10. Such atlases seem to be the bourgeois equivalent of the types of visual material included by Quiccheberg in his first and fifth categories, except that the vision of the Dutch collectors extended much wider over the 'whole' world, instead of the emphasis on one particular dynasty and territory that characterised the princely collections. On the other hand, the territories for which the Dutch East India Company held a monopoly filled four volumes of the atlas of Van der Hem.

28. Van der Waals 1992, p. 156 and cat. no. 318: shields and body decoration of Ceramese warriors. For his drawings of plants and animals see, for example, the *Codex Witsenii* of 1692 (Wilson *et al.* 2002).

29. The chronology of these events is eloquent: Witsen established his Siberian collection in 1703. The first edition of his book, however, came out in 1692, followed by a second in 1705 and a third in 1785. The second and later editions were illustrated. The *Kunstkamera* collection in question was largely acquired through the governor of Siberia in the years 1715-1718. Peter I subsequently dispatched the researcher Daniel Gottlieb Messerschmidt to this part of the empire in 1719.

30. On the other hand, if we compare the Russian drawings of the 1730s with the Dutch illustrations, a striking difference emerges. While the Dutch illustrator depicts the jewellery displayed on a piece of wood covered with paper and is

ill. 2. Unknown artist, Scythian
plaques and jewellery. Etching from:
Nicolaas Witsen, *Noord en Oost
Tartarijen* (Amsterdam, 1705), after
p. 748. Artis Library, University of
Amsterdam, inv. no. 230:7
ill. 3. Unknown artist, Scythian
plaques and jewellery. Etching from:
Nicolaas Witsen 1705 (see fig. 2).



not afraid to deploy *trompe l'oeil* effects such as tears in the paper and curling edges, the Russian artists confine themselves to making direct representations of the objects, without much of a suggestion of a surface. Such issues concerning the style of representation deserve more attention than we can give them in the present publication.

31. J.D. Major, *Unvorgreifliches Bedencken von Kunst und Naturalien Kammern ins gemein*, (originally) 4 vols., Kiel 1674; 1704 edition: chapter VIII, sections 12, 13 and 14 on pp. 18-19.
32. Major 1704, chapter VIII, section 5 on p. 16. The studio context that Major envisages for the production of the drawings is also interesting and relevant for the situation in St Petersburg. He complains that the managers of collections are, generally speaking, not practical enough, by which he means that, beside their unmistakable scientific qualities, they do not have sufficient mastery of the skills required to preserve a collection properly and in an orderly fashion, such as drawing, making scale reproductions, etching, polishing, carpentry and the use of adhesives.

the preservation of a good arrangement: for example, if an object is too large to be placed with others of the same type, the problem can be solved with a 'small drawing on a reduced scale'.³² Since Major's publication was available in the libraries of Robert Areskin and Jacob Bruce,³³ both of which were incorporated in the book collection of the Academy of Sciences, it may be assumed that members of those circles were familiar with proposals of this kind, especially as Major's recommendations simply put into words a practice that had already become common from about 1560. In his case, though, the visual summary of 'the great book of nature' was deployed in the scientific project of what he called his own 'experimental era'.

In a certain sense, if we pass over his religious interjections for a moment, the pragmatic physician Major was already ventilating in 1674-1675 the same sort of ideas that Gottfried Wilhelm Leibniz would attempt to impress upon the Tsar in the late 1690s. On the other hand, we should realise that Leibniz's proposals were a part of the plan for a universal world encyclopædia, on which he had been working for decades. What is interesting for present purposes is that he assigned an important role in that project to images. The summary that he envisaged of all available knowledge was to be supplemented with an *Atlas Universalis*, modelled on the collection of prints of Michel de Marolles that Louis XIV had purchased in 1667 at the instigation of Colbert.³⁴ Leibniz made similar proposals to Peter the Great. In 1697 he advised the Tsar to install cabinets in which 'as for nature, it is particularly necessary to include stones, metals, minerals, real plants or

imitations of them, dried or embalmed animals, skeletons, *paintings and other imitations of what cannot be obtained as an original* [italics DM].³⁵ In addition he recommended the establishment of a library with not only books and manuscripts, but also ‘a large quantity of figures, woodcuts and copper engravings, like the 100 volumes to be found in the Royal French Library with figures and sketches, in which everything that is otherwise described in words is also presented to the eyes’.³⁶

Leibniz therefore envisaged a three-stage model: objects, drawings or prints, and texts or books. It was a model that was very common at the time and that Peter could have observed extensively at first hand during his European journeys of 1697–1698 and 1716–1717.

THE REAL PAPER MUSEUM AS REPRESENTATION OF THE OBJECTS IN AN ACTUAL COLLECTION

Though in theory a distinction can be drawn between the virtual and the real paper museum, in practice they coexisted without much emphasis being placed on the difference between them. The albums of Rudolf II have already been mentioned, which are a combination of the two variants. It is also practically certain that the decision to initiate the drawing activities in St Petersburg that resulted in the 58 boxes with ‘Icones pictæ’ was not based exclusively on any single model. It is more likely that the first impulse goes back to Peter’s introduction to a number of researchers during his European journeys. They showed him their own research material, that usually also included drawings and prints. Whether that visual material referred to objects that belonged to them or not probably had little effect on their influence as a source of inspiration. Particularly relevant in this connection are the drawings and printed works of Maria Sibylla Merian and her daughters in Amsterdam. The purchase of almost all of this material by Areskin and the Tsar himself, and the invitation to Merian’s youngest daughter, Maria Dorothea Graff, to join his employ together with her husband, the painter Georg Gsell, point in the same direction. After all, it was in connection with the appointment of this scientific artist that we find the first specific reference to the type of activity which was to get under way on such a scale in the 1730s and 1740s: it was laid down in 1723 that ‘Mrs Gsell’ would make watercolours ‘after nature’ of the objects in the *Kunstkamera* in accordance with the instructions of the director. Those objects consisted of animals and plants, ‘works of art’ and antiquities, including those which were to be added to the collection at a later date.³⁷ It therefore

33. It contained Michael Bernhard Valentini, *Museum museorum* [...], Frankfurt 1704, which included Major’s text. On Areskin see Appleby 1983, p. 392. For Bruce see Savel’eva and Kopanev 1989, p. 291.

34. Schulte-Albert 1972, p. 63. See too Balsiger 1970, pp. 783–787 and 1955, pp. 44–45 (Marolle’s collection as ‘a paper Kunst- und Wunderkammer’) and pp. 164–169 (Marolle’s introduction to his catalogue of 1666). Sauvy 1973, p. 104.

35. Guerrier 1873, no. 13, p. 17.

36. Guerrier 1873, no. 240 (1716), pp. 349–350; see too no. 73 (1708), p. 97. It is interesting that in all his proposals to Tsar Peter, Leibniz emphatically underlined the importance of cabinets with apparatus, machines and instruments – a category of objects that was to occupy a significant place in the St Petersburg Academy, including drawings of them.

37. The director of the *Kunstkamera* was Laurentius Blumentrost, the man who formulated the project for an Academy of Sciences with librarian Johann Daniel Schumacher in 1724 and who became its first president after its foundation in 1725. Maria Dorothea’s (draft) contract may have been drawn up by him. The other tasks mentioned are interesting too: she was expected to contribute to the ‘decoration and ornamentation’ of the cabinet and to train apprentices. She was provided with brushes, paint, paper and parchment and received a salary of 300 roubles a year commencing on 1 September 1723. Administration of the *Kunst-kamera*, SPBARAN, f. 1, op. 3, no. 2, 161 reverse–162. With thanks to Jozien Driessen.

38. In the Netherlands Peter or his assistants could have seen the collection of drawings of the Delft physician Hendrik d'Acquet, for example. Three volumes with about 1,000 leaves of these drawings of animals and plants are still extant, which can only be a fraction of the original total. D'Acquet had a number of his drawings reproduced for the publication of *D'Amboinsche rariteitkamer* of Georg Everhard Rumphius (Amsterdam 1705). That book found its way with the library of Areskin to the Academy of Sciences. Appleby 1983, p. 393. Seba had also supplied the Tsar with a copy in 1716 when his collection was sold (oral communication, Jozien Driessen). For Rumphius see Exh. cat. Amsterdam 1992a, vol. 2, nos. 260-261 and Exh. cat. Delft 2002, pp. 112-125.
39. In this connection it is interesting to consider the arguments used by the president of the Academy, Johann Albrecht Korff, in 1733 in the Senate to request more funds for the by now expanded drawing and engraving facilities of this institution and its press: 'Although some would argue that Paris has an Academy, that London and Berlin have learned societies and that none of these have their own printing house nor an engraving workshop nor other skilled workmen, and so we do not need them here either; but they are wrong in their judgement; for in Paris, London and Berlin, where science and learned accomplishments have flourished for so many years, there they have printing houses, engravers and other skilled craftsmen in abundance, but here we cannot yet boast of that. If God gives his blessing in what has been begun, then perhaps in a few years time we can get rid of these labours and special expenses'. Cited in Thomas 1988, p. 26, who refers to Kopelevich 1977, p. 131.
40. See the introduction in this volume (Themes for further research) and the contribution by Andrey

looks like an early formulation of the plan for a paper museum, as a logical follow-up to the appointment of a practising natural scientist and artist who could count on a long family tradition. Whether they had examples of the drawn reproductions of existing collections in mind is not documented, but it seems natural to assume that the illustrated scientific books and catalogues that were available in St Petersburg by this time must have had a stimulating effect.³⁸ It should be borne in mind that the desire to produce such publications in Russia too in the future almost automatically meant relying on the objects in the *Kunstkamera* for the illustrations – at least, if the intention was not simply to copy already existing images that had been made abroad – since at this time there were not many other collections in the country that could serve as a reservoir for visual material. Seen in this light, the decision to have drawings made of the *Kunstkamera* collection has a somewhat different character from what the same step in a country with a long tradition of free enterprise in the field of the arts and sciences would have meant.³⁹

Unfortunately little is known about Maria Dorothea's stint in St Petersburg. No signed or otherwise documented work of hers has been found to date, and hardly anyone has ventured to make attributions. Natalya Kopaneva claims that Maria Dorothea coloured the engravings in one of the first books to be produced by the newly founded Academy press, Johann Christian Buxbaum's *Plantarum minus cognitarum centuria 1(-v) complectens plantas circa Byzantium & in Oriente observatas* (St Petersburg 1728-1740). (fig. 3) There are also good grounds for assuming that the designs for these engravings were made by Maria Dorothea.⁴⁰ Moreover, it is probably possible to deduce something about the function of the paintings that she made in the 1720s from the description of her tasks and the nature of the material that was made available to her. What is striking is that during those years Maria Dorothea worked on parchment and not just on paper, the less durable and less expensive material of the *Kunstkamera* drawings of the 1730s and 1740s. Were the parchments from those early years finished products, or were they designs for engravings to illustrate an album or illustrated catalogue of the *Kunstkamera*? In view of the lack of documents with an explicit reply to this question, it is worth examining what kinds of practices were current in other countries at the time.

To serve as designs for prints was not the only possible function of paintings on parchment. There might be other reasons for a collector to want to record his collection in unica and to choose this de luxe material for that purpose. This is demonstrated, for example, by the

paintings that Louis XIV had made of the plants in his botanical garden by Nicholas Robert. For several decades Robert had been painting the plants in the garden in Blois of Gaston d'Orléans, an uncle of the king. After Gaston's death in 1660 these five folio volumes of costly *vélin*s came into the possession of Louis XIV, who decided to continue this tradition on the advice of his minister Colbert, who was in charge of the king's library. Louis created the position of royal miniature painter with official quarters in the botanical garden and appointed Robert to the post. This resulted in a large collection of paintings of plants and later also of birds. It was so artistic and attractive that Colbert had copies made by Robert and his assistants.⁴¹ But the *vélin*s were not intended to serve as the basis for prints. Their most important quality lay in their nature as exclusive works of art, though this was compatible with their duplication once only for the king's most powerful minister. In this respect this project differed from the other sketching activities that Colbert sparked off and which proceeded from the Académie des sciences. Their main purpose was a scientific one: the drawings made during expeditions, such as Tournefort's expedition via Greece and Asia Minor to Persia in 1700-1702, and the drawings for a large natural history of the plant world did lead to publications.⁴² I shall return to these activities in the following section in connection with the so-called *Cabinet du Roi*, a large-scale enterprise intended (among other things) to make the king's collections world-famous by means of prints. In the case of the *vélin*s, however, they resembled the real collection in terms of function: both the collection and the *vélin*s were to be unique. An advantage that the painted version had over the actual collection of plants was that it showed them in their unchanging beauty, alive and intact, and all blooming at the same time. In this way the proud owner could show the collection to visitors at any time and without much of an effort.

Could Peter I have had a similar function in mind? Given his practical and general unceremonious attitude, it is unlikely that he was particularly interested in uniqueness and artistic value. He was primarily concerned with functionality in the framework of scientific investigation, and a different type of visual material was more suitable for that purpose.

For parchment could also be used for paintings that were intended to serve as the basis for prints for dissemination, whether in colour or not. The result was a double product: a luxurious corpus of unique paintings, and a publication that was both representative and academic in nature. A good example is the publication of the Amsterdam 'Medicyn-Hoff', which had just gone into production when Peter

Sytin. The prints were made by Alexey Zubov, an engraver who was trained in Moscow by the Dutch engraver Adriaan Schoonebeek. Kopaneva suggests that the 'unknown artist' who converted the field sketches into designs for these engravings might have been Maria Dorothea too. Nor is it ruled out that work by her is to be found among the many unsigned *Kunstkamera* drawings. After all, she and her assistants worked on this project from the start in the early 1730s, and probably continued to do so down to her death in 1743 at the age of 65.

41. Nissen 1951, vol. 1, pp. 96-97; Exh. cat. Vienna 2001, pp. 94, 120. The copies were sold around 1728 to Eugene of Savoy as the originals of Robert.

42. Drawings by Nicolas Robert, engraved by Abraham Bosse, with a group portrait of the members of the Academy in the company of the King and Colbert as frontispiece, engraved by Sébastien Leclercq. Nissen 1951, vol. 1, pp. 97-98.

43. *Horti medici Amstelodamensis rariorum tam Africanarum, quam utriusque Indiæ, aliarumque peregrinarum plantarum magno studio ac labore, sumptibus civitatis Amstelædamensis longa annorum serie collectarum, descriptio et icones ad vivum æri incisæ*, Amsterdam 1697 (vol. 1; Johannes Commelin ed.), 1701 (vol. 11; Casparus Commelin ed.). Printed in two columns with parallel text in Dutch and Latin. Exh. cat. Amsterdam 1992c, no. 6.4 a and b.
44. This so-called *Moninckx atlas* consists of nine volumes and is kept in the Library of the University of Amsterdam (Hs. VI G 1-9). See also <http://dpc.uba.uva.nl/CollectieBotanie>. The drawings were made between 1686, five years after the establishment of the garden, and 1707. An attempt was made to resume the work in 1749, which led to an additional five watercolours, this time on paper. Exh. cat. Amsterdam 1992c, no. 6.1, 2. Nissen 1951, vol. 1, p. 85 and vol. 11, no. 389. See further Wijnands 1983.
45. A total of 111 of these designs for the engravings have been preserved (Library of the Wageningen Agricultural University, Spec. coll. R 361 B05). Exh. cat. Amsterdam 1992c, no. 6.3.
46. MIP Vol. II, *pars prima*, 1741, p. 179, no. 2: 'Horti medici Amstelodamensis rariorum plantarum historia. Cum tabulis in æs incisis, quibus colores addidit Mar. Sib. Meriana. fol.'.
47. Ovenell 1986, pp. 50-51. Various catalogues without illustrations were drawn up from 1683 onwards with the intention of having them printed. See MacGregor 2000.

visited the Dutch capital for the first time in 1697-98: the *Horti medici Amstelodamensis [...] plantarum [...] descriptio et icones*.⁴³ (ill. 4) The 420 watercolours on parchment on which this edition was based were mainly the product of Jan Moninckx and his daughter Maria.⁴⁴ It is noteworthy that the artists included two other women, namely Alida Withoos and Maria Dorothea Gsell's sister Johanna Helene Herolt. Right from the start, Jan Commelin, the superintendent of the garden, wanted a representative publication of the main plants that grew there. After a selection had been made from the original paintings and 28 new ones had been added, the result was a two-volume work with a total of 230 copper engravings. It is extremely likely that when the Tsar and his advisers were orientating themselves in Amsterdam in 1697-1698, they saw the first volume with their own eyes fresh from the press and could also learn about the different stages of production that the illustrations for such a book went through: from painting via pen drawing in Indian ink to engraving,⁴⁵ crowned by the addition of colour by a skilful hand. At any rate, the publication turns up in the 1741 catalogue of the *Kunstkamera* in an edition hand-coloured by Maria Sibylla Merian.⁴⁶

Maria Dorothea's earliest activities in St Petersburg may well have been in line with this tradition, which will be discussed in more detail in the following section. However, the recording of a collection on a durable material like parchment could have yet a third function, and one connected more with registration and measures to prevent theft and decay. One of the few motivations for a paper museum that has come down to us emphasises that function. It is the *Statutes, Orders & Rules*, for the Ashmolean Museum in the University of Oxford of 21 June 1686, in which the founder Elias Ashmole specified in point 6: 'That whatsoever naturall Body that is very rare, whether Birds, Insects, Fishes or the like, apt to putrifie & decay with tyme, shalbe painted in a faire Velome Folio Booke, either with water colors, or at least design'd in black & white, by some good Master, with reference to the description of the Body it selfe, & the mention of the Donor, in the Catalogue; wch Booke shalbe in the Custody of the Keeper of the Musaeum, under Lock & Key'. He added in point 12 that not a single object may be lent 'unless to be delineated or engraved, for the preservation of its memory, in case it be perishable'. Regrettably, this book of drawings was never made.⁴⁷

The most likely hypothesis is that several motives simultaneously lay behind Maria Dorothea's instructions of 1723 to copy all the plants, animals, 'works of art' and antiquities of the *Kunstkamera*, and that one of them was the need for a practical visual compendium



ill. 4. Frontispice of Casparus Commelin, *Horti medici Amstelodamensis rariorum[...] plantarum [...] descriptio et icones [...]*, Vol. II, Amsterdam, 1701, Library Teylers Museum, Haarlem

in the style of Ashmole's (unfulfilled) project for a book. There is no reason to suppose that Peter and his retinue came across the idea when they visited the museum in Oxford in 1698. It looks as though this demand for a visual record was shared by more than one collector. Besides preserving ephemeral objects, a visual inventory provided the owner and the user with a literal survey of the collection, which was much harder to obtain on the basis of the objects themselves. But the distance between demand and fulfilment was apparently greater elsewhere than in St Petersburg. It was probably the rapid expansion of the *Kunstkamera* there that made the need more urgent for a survey, especially in the mid-1720s, when the move to the new *Kunstkamera* premises was imminent.⁴⁸

The later drawings on paper also had this function (among others) of providing a register. Its importance proved to be extremely topical when a fire broke out on 5 December 1747 that severely damaged the museum building and the collection. After that catastrophe the drawings proved their worth, particularly because in many cases they included an inscription that referred to the cupboard and shelf where the

48. The new *Kunstkamera* on Vasilievsky Island was opened in 1728, although the building was not yet completely finished.

49. Shafranovskaya 1969.

50. Driessen 2003. Volumes III and IV were published posthumously in 1759 and 1765 respectively. Seba had already died in 1736, and the cabinet was auctioned in 1752.

51. See note 37.

52. Black 1986, p. 89 refers to the anti-German policy of the Empress Elizabeth. The fear that information might leak out to other countries was fanned by the premature return of a number of members of the Academy to Germany: the mathematician Leonard Euler and the anatomist Johann Georg Duvernois returned in 1741, followed by the astronomer Gottfried Heinsius and the physicist Georg Wolfgang Krafft in 1744–1745. The botanist Johann Georg Gmelin ‘deserted’ in 1747. Security officers were placed in the printing press, the library and the *Kunstkamera* in the same years. See also Exh. cat. Halle 1996, p. 313.

53. MIP Vol. II, *pars prima*, 1741, pp. 176–178. See Introduction, ill. 4 and 5.

object in question had been displayed and to its number in the MIP catalogue of 1741–1745. The combination of image and text made it possible to see what had been lost and on that basis to undertake appropriate action to replace it. Thus in 1753 an expedition to China was given copies of the drawings that had been made before the fire with instructions to acquire replacements for the illustrated objects.⁴⁹ In the case of the reconstruction of the collection of animals, which had been just as seriously affected by the fire, use was made of another paper museum: the richly illustrated catalogues of Albert Seba’s (second) collection, the *Thesauri* of 1734 and 1735, enabled the administrators of the *Kunstkamera* to make selective purchases when that cabinet came onto the market a few years after the fire.⁵⁰

Another point of resemblance between the procedure in St Petersburg and the statutes of the Ashmolean Museum is the emphasis on the security of the drawings, with the difference that in St Petersburg there was concern about the misappropriation of intellectual property, something which does not appear to have been an issue in Oxford. Maria Dorothea Gsell’s contract of 1723 stipulated that ‘copies of what she is given to illustrate may not be passed on to anybody without permission [of the director of the *Kunstkamera*]’.⁵¹ Apparently it was not the intention that those images should circulate freely and dilute the uniqueness of the *Kunstkamera* collections. A similar embargo on drawings (and other items) can be found in the handling of the material from the Second Kamchatka Expedition, which was moved out of the Academy in 1744 from fear of its being copied for the benefit of foreign monarchs.⁵² It is not known whether the 58 boxes of the paper museum were kept ‘under Lock & Key’, as the album in the Ashmolean Museum was. Together with the albums of plates and illustrated manuscripts of Maria Sibylla Merian mentioned above under category 1, they were stored in room UU on the first floor of the *Kunstkamera*, next to the large room with the anatomical and zoological collections of Ruysch and Seba. The fact that the boxes with drawings are listed in the catalogue of 1741⁵³ indicates that they were regarded as a component of the collection that, like its other parts (the objects, albums and books), could be consulted and used, in the first instance by the members of the Academy of Sciences itself.

A number of the drawings were engraved on 26 copper plates in the year 1747. It may be concluded from this that the corpus of drawings was assigned the function outlined above of providing material for an album of prints and/or an illustrated catalogue. In this respect too, the Academy of Sciences was following in the footsteps of a number of similar enterprises in the rest of Europe.

EDITIONS OF PRINTS

Mention has already been made of the two albums of the *Hortus Medicus* in Amsterdam (1697-1701), which contained a total of 230 prints showing the most important plants of this botanical garden. It was suggested that publications like this may have prompted Peter the Great to appoint Maria Dorothea Gsell to record the objects in his *Kunstkamera* in paintings. In the light of this background, it is noteworthy that, as far as we know, no album of *plants* was made in St Petersburg, presumably because the botanical garden there did not (yet) lend itself for such a project. We know that drawings were made, however, of the dried plant material that was kept in the *Kunstkamera* when Johann Wilhelm Lürzenius sketched (certain leaves from) the herbarium of Frederik Ruysch around the end of the fourth decade of the eighteenth century, but these drawings are no longer extant.⁵⁴

The plates of 1747, engraved after drawings of objects in the *Kunstkamera* by Ivan Sokolov and coloured by Andrey Grekov – both of whom were former pupils of the Gsells – cover a very different thematic field.⁵⁵ Apart from a few Russian memorabilia (such as the key of the city of Derbent), they concern primarily Siberian and a few South Asian antiquities – approximately 100 objects in 26 plates. The precise purpose of the prints is not known. Before considering whether they – and thereby indirectly the drawings on which they were based – were intended for an album of highlights, it will first be necessary to examine that type of publication more closely elsewhere in Europe.

The production and publication of such luxurious publications of the objects in a collection was an expensive and painstaking task. It is therefore hardly surprising that it was often well-to-do private individuals who managed to produce works of this kind (such as Levinus Vincent and Jacob de Wilde, as well as Seba). It is even less surprising that monarchs (or, in the case of the Amsterdam *Hortus Medicus*, an institution under the control of the municipal authority) embarked on similar enterprises. They had political motives too, which justified the large expense and effort involved. The print editions were sometimes incorporated into a larger corpus of images of mile-stones in the field of politics or science during the régime of the ruler or authority concerned. The work as a whole was intended to be distributed to the honour and glory of whoever had brought these collections together or had enabled these activities. This was done very explicitly at the court of the French king Louis XIV, where the aim was to produce a visual showcase in which the history and the current achievements of

54. The 'Icones plantarum' in the corpus, which accounted for no less than 11 boxes, had a different sort of connection with the objects that were physically present in the museum than was the case for the other categories of objects. There were two herbaria in the *Kunstkamera* (at least according to the MIP of 1741), namely those of Frederik Ruysch and Johann Amman, as well as a group of aquatic plants. According to the same source, the boxes with 'Icones plantarum' contained not drawings of these (dried) plants, but drawings of plants that grew in South Africa (Cape of Good Hope) and South-East Asia. Box x also contained copies of the illustrations in Buxbaum's *Centurie*. Nevertheless, drawings were made of herbarium plants. Lürzenius sketched not only Ruysch's herbarium but also that of Johann Georg Gmelin for the publication of the latter's *Flora Sibirica*, volumes 1 and 2 of which were published by the Academy in 1747-1749.

55. The first impressions were lost in the fire of 5 December 1747, but the 26 copper plates survived. In 1748 Sokolov was instructed to make prints from the plates again, this time in sixfold, and to give the prints to Grekov to be coloured. Only 10 of the 26 coloured prints have been found (Hermitage, inv. nos. 8890-8899). There is also an impression of the whole series, though without colour, that (according to information provided by Galina Printseva) was bound in a volume with the title *Monumenta Sibirica* – although it included illustrations of objects from other regions too – in the first half of the nineteenth century (Hermitage Library, inv. no. 20005).

the royal house in the field of politics, science and the arts could be displayed. The production of the prestigious *vélins* in the 1660s has already been mentioned. Simultaneously an extensive series of prints was issued, not only of the king's tapestries, coins and medallions, plants, animals, sculptures and paintings, but also of his palaces, festivities, battles and of the cities that he had taken, all to illustrate his glorious rule. They were printed in the *Imprimerie royale*, while the preparatory work was undertaken by the *Académie royale des beaux-arts* and the *Académie royale des sciences* (the former had been founded in 1663/64 and the latter in 1666 to centralise and promote the arts and sciences and to put them to the service of the monarchy). The propaganda potential of prints in particular was recognised, especially by Colbert, who had become *Surintendant des bâtiments, arts et manufactures* in 1664. He ensured that the sheets, the work of artists like Sébastien le Clerc and Abraham Bosse, were all of the same format and were combined in thematic *recueils*, in many cases with a lengthy text (supplied by figures such as André Félibien and Claude Perrault). The king used the collections as gifts; via his ambassadors and via Jesuit missionaries, they fulfilled the same function abroad in countries as distant as Persia. They were also retailed on the free market.⁵⁶ Peter the Great, who had well orientated himself in Paris, had a few of them in his library, including the two volumes with the *Tableaux du Cabinet du Roi* (Paris 1677). The publication of the series of medallions struck in honour of Louis' heroic feats made a particularly strong impact. This album of *Médailles sur les principaux événements du règne de Louis le Grand, avec des explications historiques* (Paris 1701) was ordered for the Tsar in Amsterdam in 1718 by Schumacher, together with two volumes of the *Thesaurus Brandenburgicus* (Berlin 1697), the publication of the collection of gems and coins of Friedrich III/I of Brandenburg-Prussia.⁵⁷ The latter also owned an exemplar of the French album, as did Emperor Karl VI, who after his coronation in 1711 followed the example set by Louis and ordered the production of a *Historia metallica seu numismatica Imp. Caroli VI*.⁵⁸ Peter the Great began to immortalise his military achievements in medallions in 1695/96, and it was a matter of course that drawings would later be made of them too. If we take these albums into consideration, we can assume that the medallions were drawn with the intention of eventually using these drawings as the basis for a printed edition to celebrate the honour and glory of the Russian Emperor.⁵⁹ This ambition was not realised. The same is true of the collection of ancient coins, which was also drawn in the years 1740-1750.

56. Sauvy 1973, p. 121;
Grivel 1985, p. 47.

57. J.D. Schumacher to the Reverend Clermont in Amsterdam, St Petersburg 1 April 1718: SPBARAN, f. 1, op. 3, no. 2, 76 reverse-78. With thanks to Jozien Driessen.

58. Lhotsky 1941-45, vol. II, p. 400.

59. Peter adopted the title of Emperor (imperator) in 1721, when Estonia and Latvia were incorporated in the Russian Empire by the terms of the Peace of Nystadt.

The French project raises the question of where the border between the publication of a paper museum and that of a ‘paper princely entourage’ or of ‘paper feats’ really lies in the context of the courtly culture of the seventeenth and eighteenth centuries. The total of these collections has become known as *Le Cabinet du Roi* – effectively a *pars pro toto*, since this title originally applied only to the first of the two collections of reproductions of the paintings (1677) and to the one with the ancient coins (undated). After all, the other subjects depicted were not to be found in a ‘cabinet’, and in many cases were not even objects that could be collected (buildings, festivities, battles). Images of plants and animals, i.e. illustrations of objects that could be collected, were incorporated in *Mémoires pour servir à l’histoire naturelle des plantes* or *des animaux*. These were illustrated scientific studies, not print editions of a collection, even though the study objects in question could be found in the royal garden and zoo. Nevertheless, this enterprise must be mentioned in its entirety here precisely because it throws light on the customary embedding of princely collections, along with their academic study and their representation in drawings or prints, within a political or even propagandistic context.⁶⁰ In this respect, this French enterprise ultimately goes back to the programme that Quiccheberg had outlined in his *Inscriptiones* of 1565.

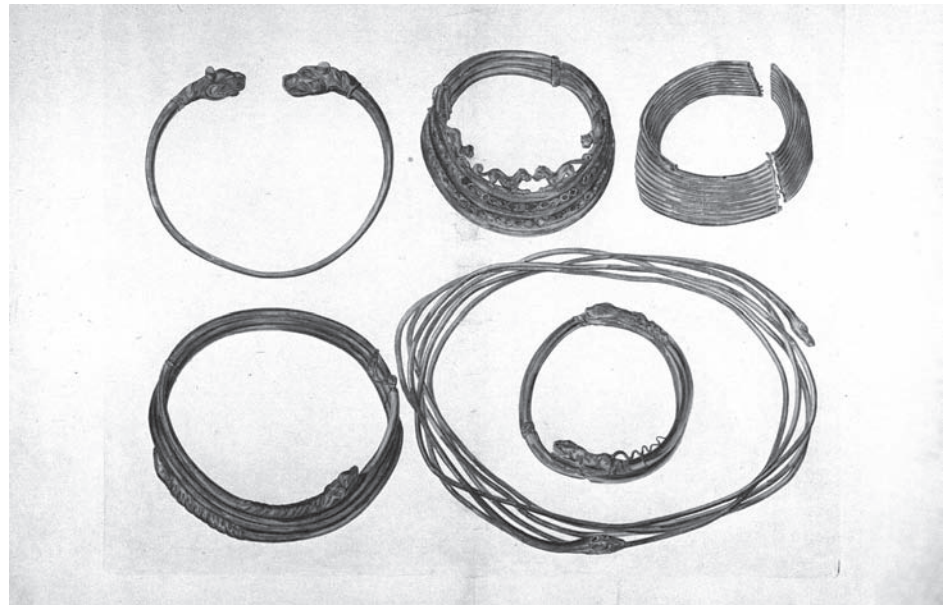
This theme naturally raises the question of what the situation was like in Russia. What connections existed there in the period from about 1724 to 1760 between the drawing and engraving activities of the Academy of Sciences, on the one hand, and the desires and demands of the successive tsars, on the other? There is no shortage of prints of battles, (coronation) festivities and fireworks that attest to the existence of such connections,⁶¹ but in the case of the drawings of objects from the *Kunstkamera* there is little evidence of a *direct* relation with the court. Apart from the decree issued in 1727 by Peter II (who was twelve years old at the time) for the compilation of a catalogue with illustrations of the most important objects in the collection, and the instruction to Lürzenius in 1746 to make copies of 48 drawings by Maria Sibylla Merian for the Empress Elizabeth,⁶² no cases are otherwise known of direct imperial intervention in the drawing of objects in the collection nor, on the part of the Academy authorities, of any form of catering to imperial whims in this direction, although in the late 1730s, once Schumacher had got down to work on the catalogue, the Senate did exert pressure to have the job completed.⁶³ This promising field of research unfortunately lies outside the scope of the present publication. For the time being we can only respond with astonishment to the fact that, if we include the preliminary steps taken

60. On the function of visual material in the construction of the image of a monarch see also Burke 1992 and Völkel 2001 (though neither author discusses the role of collections in that context).

61. See Driessen 1996a, pp. 101–105 and Werrett 2000, especially for the fireworks. Cracraft 1997 provides many examples and speaks on p. 167 of ‘Peter’s harnessing of the new imagery in support of his own monarchy’, a policy that was continued by his successors.

62. Stetskevich, this publication note 56 refers to *Materialy* 1885–1900, vol. 1, p. 295.

63. Stetskevich, this publication note 57 refers *inter alia* to Kopelevich 1977, p. 121.

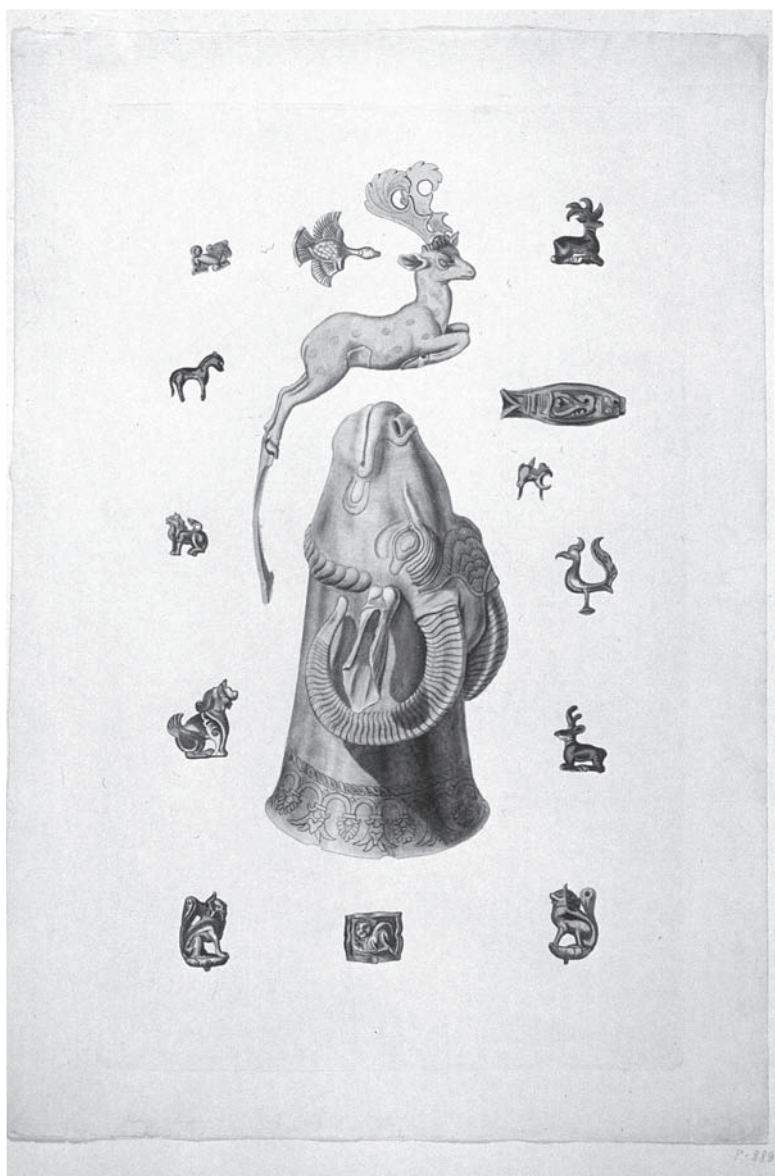


64. See note 5. Stetskevich notes that no dated drawings from the years 1739-1742 have been found to date. However, it is difficult to draw conclusions from that absence, since we only have a part of the original total number of drawings at our disposal and only a limited number of the drawings that are known to us are dated.

65. Johann Daniel Schumacher, librarian of Peter I from 1714 and head of the *Kunstkamera* from 1718 (when it was still kept in the 'House of Kikin'), was appointed head of the chancellery of the Academy in 1728. He played an extremely important role there, at first beside the Academy presidents Hermann Karl von Kayserlingk (1733-1734) and Johann Albrecht Baron Korff (1734-1740), and subsequently, during a period when there was no president, as head of the institute, a position that did not change when in 1746 Kirill G. Razumovski was appointed president. The only break in his career was his suspension from 1741 to 1743. Schumacher died in 1761 at the age of 71.

by Maria Dorothea Gsell, work on the drawings continued without flagging from about 1724 to 1760 under six different tsars and tsarinas, in spite of all the political changes of direction.⁶⁴ The years 1740-1741 (two coups d'état) and 1741-1743 (a conspiracy within the Academy against Schumacher) in particular were very tumultuous, but this does not appear to have had any consequences for the drawing activities. Apparently there were forces at work that were capable of standing up to everything, the most important of which was probably Schumacher himself.⁶⁵

There was no actual publication of one or more albums in St Petersburg in the period 1730-1760, but it cannot be fortuitous that the prints that were made concerned Siberian and Tartar antiquities (ill. 5, 6 and 7) – a field that we can refer to as the archaeology of the Russian Empire – and memorabilia with a political or dynastic significance. For instance, we recognise the key of the city of Derbent ('the Iron Gate to the East') that was taken by Peter I in 1722, lying on a draped fabric, probably in the form in which it was presented to him at the time. There is also the Gothic monstrance from Reval (now Tallin in Estonia) that Lord and commander-in-chief Alexander Menshikov took as a trophy in 1704 during the Great Northern War and brought to St Petersburg, and a goblet encrusted with gems, that was given to Peter by his ally the Danish king during his stay in Copenhagen in 1716 (see for the drawings cat. nos 922, 941 and 933).⁶⁶ We also have



ill. 5. Ivan Sokolov, Andrey Grekov, Four Scythian gold plaques. 1747/48. Coloured engraving, 543 x 380.

Hermitage, inv. no. PP 8895. (MIP II 1, pp. 185-186, nos 30, 32, 34, 37)

ill. 6. Ivan Sokolov, Andrey Grekov, Scythian gold neck and head jewelry. 1747/48. Coloured engraving, 765 x 565. Hermitage, inv. no. PP 8890. (MIP II 1, pp. 184-185, nos 13, 15, 22, 25, 28)

ill. 7. Ivan Sokolov, Andrey Grekov, Achaemenid rhyton in the shape of a ram's head (Iran, 5th-4th century BC). 1747/48. Coloured engraving, 545 x 380. Hermitage, inv. no.

PP 8897. (MIP II 1, p. 188, nos 11, 14: 'Signum militare Tattaricum argenteum')

66. See for the corresponding drawings: Hermitage, inv. nos. 7141, 7056, 7061 (our cat. nos. 922, 941 and 933). Massie 1985, pp. 398, 437 en 824-5.

67. This suspicion finds further support in the way in which the decision to continue the engraving project twenty-five years later was formulated (see too Natalya Kopaneva in this publication). Schumacher was dead in the meantime and the tasks of the chancellery of the Academy were transferred five years later to a commission. It was this commission that decided to resume the interrupted project in 1774, adducing as argumentation that the engravers no longer had much to do, and that in this way the series of engravings of 'rare old golden Tartarian and other objects that were kept in the *Kunstkamera* and the numismatic cabinet' that had been begun 'long ago' could be brought to completion (see Alekseeva *et al.* 1985, no. 87, pp. 150-151). It thus looks as though right from the start the programme envisaged a publication of the coins and medallions as well as an edition of prints of the Siberian antiquities. The project was in fact resumed after the decision of 1774. Kopaneva mentions that in 1803 the Academy had at least 36 copper plates that had been made for 'the book of the *Kunstkamera* rarities from the numismatic cabinet'.

68. *Museum Etruscum, exhibens insignia veterum Etruscorum monumenta, æreis tabulis 200 nunc primus edita et illustrata observationibus Antonii F. Gori*, Florence 1737-1743.

69. Oligerus Jacobæus, *Museum Regium*, Copenhagen 1696. Johann Daniel Major, *Bevölckertes Cimbrien oder die zwischen Ost- und West-See gelegene halb-Insel Deutschlands, nebst dero Ersten Einwohnern und ihren eigentlichen durch viel und grosse Umwege geschehenen Ankunfft, summarischer Weise vorgestellt*,

the impression that there was a plan to publish the coins and medallions in print, an impression that is strengthened by the design of the drawings and the table numbers on the sheets.⁶⁷ They were three areas that were connected with political and dynastic motives, the collecting of which was still in line with the programme that Quiccheberg had drawn up for the ideal princely *Kunstkammer* in 1565. As far as the coins and medallions are concerned, their political significance has already been indicated in connection with the cabinet of Louis XIV. An interest in the archaeology of the ruler's own empire or territory can also be documented for a number of European states. It can be found, for example, in Tuscany, where the Etruscan heritage became the focus of attention towards the middle of the eighteenth century, resulting in the three-volume set of plates based on the collection of the Grand Duke, *Museum Etruscum* (Florence 1737-1743).⁶⁸ Remarkably enough, interest of this kind emerged early in the countries of Northern Europe. The catalogue of the collection of the Danish king made in 1696 included several illustrations of local antiquities, and there were also instances of the visual documentation and publication of excavations of local historical interest in illustrated books, such as that of Johann Daniel Major, active in Schleswig-Holstein, whom we have already come across in connection with his manual for collectors.⁶⁹

In this respect, however, Russia outstripped all the others. The drawing and engraving of the Siberian objects was a part of the programme of the Academy of Sciences, especially from the mid-1740s on. The expedition to Kamchatka had ended with the return of the Academy delegation; several losses had been sustained, and the remaining members were the historian Gerhard Friedrich Müller, the botanist Johann Georg Gmelin, the student Stepan Krascheninnikov, and the artists Johann Christian Berckhan, Johann Wilhelm Lürzenius and Johann Cornelius Decker. The Senate now pressed for the processing and publication of the research material.⁷⁰ The production of prints of the *Kunstkamera* objects in question fitted in with that policy, even when it concerned objects that had been in the collection since the second decade of the century, such as the Siberian animal plaques and jewellery. It should be borne in mind that already since the seventeenth century West European researchers had shown an interest in the culture and history of North-East Asia and that one of the purposes behind the establishment of the Russian Academy had been precisely to gain control of this research field for itself. As we have seen, there was a keen fear that findings might leak abroad – a fear that was exacerbated by the premature departure of a number of

scholars in the 1740s. One of them was a participant in the expedition, Gmelin, who decided during leave in Germany in 1747 not to return to Russia. Luckily the first volume of his *Flora Sibirica* had just been published in St Petersburg, but an additional payment was required to prompt the author to allow the Academy to publish the following volumes.⁷¹

Perhaps the authorities considered that a luxurious album of prints would be able to compensate to some extent for the tiresome aftermath of the Kamchatka Expedition. After all, especially in their skillfully coloured state, the prints would be an attractive visiting card for the Russian Academy, with a more directly appealing image than most scientific studies have; besides, their completion was not yet in sight. The Senate considered that Müller worked much too slowly on the study of the history of Siberia that he had been commissioned to produce.⁷² Moreover, the Academy had acquired something of a bad reputation thanks to all kinds of squabbles and to the poor financial conditions. A positive injection was needed, especially after the fire of December 1747 that destroyed part of the *Kunstkamera*. Although it amounted to no more than a few loose sheets at this stage, it seems reasonable to suppose that work was being conducted on an attractive album to accompany the Siberian studies of Gmelin and Müller.

ILLUSTRATED CATALOGUES OF COLLECTIONS AND MUSEUMS

In this category of publications of collections, the images are not the protagonists, as they were in the albums, but, usually in the form of a plate section, they serve to illustrate a text that sums up the objects of the collection in question or describes them one by one in a more or less narrative form.⁷³

An important reason to focus on this specific group of publications here is the often repeated assumption that the drawings of the objects in the *Kunstkamera* in St Petersburg were made with the aim of producing an illustrated catalogue. This hypothesis is based on the document from 1727, an assignment to the Academy of Sciences by Peter II to make a catalogue of the *Kunstkamera* 'published in Russian, with engravings of the rarest objects'.⁷⁴ The fact that in 1747 a number of drawings of primarily Siberian and historically memorable objects were engraved on 26 plates is generally taken to be a step in the process of production of such a catalogue. The production of *all* the drawings is then explained in the same way. It is questionable, however, whether this interpretation will stand up to scrutiny. In testing the probability of this catalogue thesis, it is worthwhile to follow the

Plön 1692. See Schnapp 1996, pp. 205ff.; Steckner 1994, p. 605, note 7.

70. On Müller see Black 1986, pp. 97-99. The astronomer Louis De l'Isle de la Croyère died during a crossing to America. The natural scientist Georg Wilhelm Steller died on the return journey in 1746 in Tyumen, not far from Tobolsk. Exh. cat. Halle 1996, pp. 253, 262-263, 301.

71. Black 1986, p. 106. Gmelin published the second volume himself in 1749, but the third and fourth volumes were published after his death by his nephew Samuel Gottlieb Gmelin (St Petersburg 1768-69).

72. See Black 1986, pp. 97-99.

73. Examples of the second category, the narrative catalogue, are Ole Worm, *Museum Wormianum* [...], Amsterdam 1655; Adam Olearius, *Die Gottorfische Kunstkammer* [...], Schleswig 1666 (reprinted in 1674 and 1703); Lorenz Beger, *Thesaurus Brandenburgicus selectus* [...], Berlin/Leipzig 1696 (vol. I), 1698 (vol. II) and 1701 (vol. III). In view of the character of the MIP, the emphasis here will be placed on the inventory-style catalogue.

74. Alekseeva *et al.* 1985, pp. 49-50, no. 4. Peter II succeeded Catharine I in 1727. Since he was only twelve years old at the time, this plan can hardly have originated from him personally, but must have come from the president of the Academy, Blumentrost, or from Schumacher. It is also possible that the tutors of the young Tsar, vice-chancellor Andrei Ivanovitsch Ostermann and Prince Alexander Menshikov, were behind the plan for the illustrated catalogue. After all, it was in those years that they set up an enlightened training programme for Peter, and in that connection they had a number of foreign books translated, illustrated and printed in the recently established workshops of the Academy. I am grateful to Nicolai Kopanov for this suggestion. See too Werret 2000, pp. 68-69.

75. Levinus Vincent, *Wonder-Tooneel der Nature, geopent in eene korte Beschrijvinge [...]*, Amsterdam 1706; *Het tweede deel of vervolg van het Wondertoneel der Natuur [...]*, Amsterdam 1715 (7 plates). Albertus Seba, *Locupletissimi rerum naturalium thesauri accurata descriptio et iconibus artificiosissimis expressio, per universam physices historiam [...]*, Amsterdam 1734 (vol. I), 1735 (vol. II), 1759 (vol. III), 1765 (vol. IV) (a total of 449 plates illustrating thousands of objects). For a complete reproduction of all of the plates see Müsch *et al.* 2001.

76. 'Museum S.R.M:tis Adolphi Friderici, Regis mei Clementissimi, Augustissimi, prodiit volumine primo Holmiæ 1754, folio. Cum vero ab eo tempore plurima rariora Animalia Museum hoc splendissimum intrarunt, ex his centuriam unam alteramve, instar Voluminis secundi Prodrumi, cum consensu S.R.M:tis adjicere L.B. non ingratum fore speraveram, quorum omnium icones & perfectiores descriptiones, cum multis aliis, aliquando sperare fas est'. The exemplar in the Library of the University of Amsterdam is bound together with the (also unillustrated) catalogue of the cabinet of Queen Luise Ulrike. The Academy of Sciences in Stockholm has watercolours on parchment, made by H.C. von Kruse in 1754, that were intended for the latter catalogue. Exh. cat. Bonn 1994, p. 49 has reproductions of three sheets with shells. These watercolours may also include images of objects that were purchased for the queen at the auction of Seba's second cabinet in 1752, on which see Mit 1994, p. 804, note 21.

77. Komelova 1996b, p. 88. According to Van Eeghen (1959, pp. 77-80), Schoonebeeck made the engravings for De Wilde before 1695 and entered the service of the Tsar in 1696. Van Eeghen claims that he accompanied Peter on his first trip to the Netherlands. In

procedure applied above in relation to the album thesis and to investigate what was conceivable in this field in the period under review. What did a museum catalogue usually look like at this time? Once we have obtained an impression of what was conceivable in Europe around the middle of the eighteenth century, is it still possible to maintain that the drawing activities of those years were set in motion with the aim of producing a publication of this kind? And can the prints in question have been the first step towards the conversion of the drawings into illustrative material for such a catalogue?

In principle it is conceivable that illustrative material was being produced for a museum catalogue. After all, the catalogue *Musei Imperialis Petropolitani [...]* had been published a few years earlier, and it could certainly be supplemented, since in spite of Peter II's decree of 1727, this two-volume catalogue of 1741 and 1745 did not contain any illustrations. Besides, it was printed in octavo format, and the text was confined to a brief description of the objects, without any further comments except occasionally a reference to another author. Its organisation followed that of the objects in the rooms of the *Kunstkamera* and the Academy premises.

It should be realised that the form of the MIP was fairly unusual for its time in all respects except that of the use of Latin instead of Russian. Until then, the notion of publishing a collection had usually implied that a powerful visual impulse was to be conveyed to the public, as is indicated by the use of such terms as 'Theatrum', 'Toneel' and 'Thesaurus' in the titles of a number of publications of this kind (for example, those of Levinus Vincent and Albert Seba).⁷⁵ It cannot therefore be ruled out that the two simple volumes of the MIP were intended as the first step towards a more luxurious, illustrated publication. A brief survey of a number of catalogues of other princely or institutional museums in Europe before mid-century does indeed show that such publications were expected to have a folio format and to include a number of illustrations. Nehemiah Grew's *Musæum Regalis Societatis* (London 1681), Oliger Jacobaeus' *Museum Regium* (Copenhagen 1696) and Carolus Linnaeus' *Museum S.R.M. Adolphi Friderici Regis Suecorum, Gothorum, Vandalorumque* (Stockholm 1754), for example, included respectively 31, 37 and 33 full-page plates usually illustrating a number of objects. Particularly interesting in this connection is that the second volume of the latter catalogue of the collection of the Swedish king only appeared without illustrations (1764) with the title *Tomi secundi Prodrumus* (indicating its pre-publication status) and with the author's apologetic explanation printed on the reverse of the title page to express the hope that illustrations of all of the entries

would follow.⁷⁶ Lack of funds probably played a part here, and this apology may also throw light on the lack of images in the MIP. Is it perhaps conceivable that the simple, unillustrated MIP was also intended as a provisional publication, and that it was hoped that it would be transformed into a more representative publication, in line with what was conventional elsewhere, in the near future?

The publications of the private collections that were acquired in part or entirely under Peter and his successors always contained illustrations. That of Frederick Ruysch only contained a few engravings in each volume, but Nicolas Chevalier, for example, had included a few dozen plates, on which all of the objects discussed were illustrated, in his catalogue *Recherche curieuse d'Antiquité* (Utrecht 1709). But Albert Seba's *Thesauri* surpassed all other catalogues in sumptuousness and wealth of illustrations. (ill. 8) Nor should we forget the catalogues of the Dutch collectors whom Peter visited without buying anything from them, such as Jacob de Wilde's *Gemmæ selectæ antiquæ* (Amsterdam 1703), a catalogue with 50 copper engravings probably made by Adriaan Schoonebeeck, the engraver whom the tsar had taken into his employ in 1698 after his first stay in Amsterdam, when he had visited De Wilde's cabinet.⁷⁷ All of these books were in St Petersburg. The same is true of the German collections that found their way to St Petersburg. The catalogue of the physician Christophorus Gottwald, whose cabinet in Danzig was purchased by Peter in 1716, was not complete at the time of the death of the owner in 1710. Only the 62 plates of anatomical specimens were put into circulation by his son in several exemplars, and it is likely that Peter or his associates saw them.⁷⁸ The catalogue of the collection of Johann Lüders in Hamburg, from which Schumacher purchased the gold and silver coins for Peter in 1721, was transferred to St Petersburg along with the collection.⁷⁹



Moscow Schoonebeeck trained the first Russian engravers until his death in 1714. Among them was Alexei Zubov, who was later to make the plates for: Johann Christian Buxbaum, *Plantarum minus cognitarum centuria 1* [-v], St Petersburg 1728-1740.78. Schnapper (1995, p. 618) suggests that the catalogue will have prompted the purchase, but the catalogue was not yet in existence. There were only impressions of some of the copper plates. See Nissen 1969-1978, vol. 1, no. 1656: *Museum Gottwaldianum: 62 tabulae aeneae artificiose sculptae, varias curiosas observationes anatomicas in homine et brutis complectentes, pro museo anatomico reservatae cum autoris icona – Thesaurus conchiliorum tabb. Aeneis 49 summa diligentia sculptis constans quarum priores 6 stellas marinas et corallia, caetera testacea univalvia turbinata representant*. The anatomical prints were in circulation before 1713. The plates with shells, starfish and coral were not published until 1782.

79. Claude Chifflet and Rudolfo Capello, *De antiquo nummo et praecipue romano liber posthumus, continens cheiragogiam accuratissimamtertia ed. ... auctus ea fini ut ... Nummophylacium illud luederianum hamburgense ...* Claude Chifflet prodit, accurate Rudolfo Capello, Hamburg 1678-1679. The bronze coins were purchased in 1738. Neverov 2001, p. 76.

ill. 8. Unknown artist, Leaf with different sorts of fish. Coloured engraving from: Albertus Seba, *Thesaurus 1* (Amsterdam, 1734, Tabula xxiv). Artis Library, University of Amsterdam, inv. no. OF-88-12.

80. It is debatable whether the illustrated catalogue of instruments of Heinrich Johann Bytmeister: *Biblioteca appendix five Catalogus apparatus curiosorum artificialium et naturalium* ([Helmstadt] 1735) was known in St Petersburg. Exh. cat. Braunschweig 2000, p. 316, fig. 43 (ten optical instruments). There is an exemplar of the catalogue in the Herzog August Bibliothek, Wolfenbüttel.

81. Jacob Leupold, *Theatrum Arithmetico-Geometricum, das ist: Schauplatz der Rechen- und Mess-Kunst, darinnen enthalten dieser beyden Wissenschaften nöthige Grund-Regeln und Handgriffe so wohl, als auch die unterschiedene Instrumente und Maschinen, welche Theils in der Ausübung auf den Papier, Theils auch im Felde besonderen Vortheil geben können*, Leipzig 1727.

82. Exh. cat. St Petersburg 1993.

83. See, for instance, the inventories or catalogues of the collections of Vendramin (ca. 1615–1629), Calceolari (1622), Worm (1655), Settala (1666), Kircher (1709), Vincent (1715), and of the Duke of Gottorp (1666) and the Danish king (second edition of 1710). They usually include only a few images, with the exception of Andrea Vendramin's inventory in drawings, which covered whole groups: volume IV covered 'Habitus diversarum Nationum', and volume XII was entitled 'de Rebus Indicis, & ex aliis mundi regionibus tam Orientalibus quam Occidentalibus, valde curiosis et visu dignis'. Logan 1979, pp. 69–71.

It is therefore quite likely that the idea of a museum catalogue including engravings of this kind may have played a role in the production of the drawings of the objects in the *Kunstkamera*. The prints that were made of certain groups of drawings in 1747 may have formed the first stage of the actual production of such a publication. All those foreign catalogues may have served as an example, and in those cases where there were no catalogues – scientific instruments, for instance⁸⁰ – a different kind of publication may have served as a model. Thus when Andrey Nartov and his pupils drew the instruments of the Academy of Sciences, they may have had in mind Georg Andreas Boeckler's *Theatrum Machinarum* (Nuremberg 1661 and 1703), or the illustrated technical encyclopædia of Jacob Leupold, the *Theatrum arithmetico-geometricum* (Leipzig 1727).⁸¹ Finally, Nartov himself also worked on a *Theatrum machinarum*, that can probably also be regarded as an illustrated catalogue of the collection of instruments and apparatuses in the Academy (after all, he was dependent on that collection for his material). Regrettably, Nartov's book was not published at the time.⁸²

So this may have been one of the motives for the drawing and engraving activities. This still leaves unresolved the question of why such an enormous quantity of drawings was made. Take the drawings of the tools and costumes of distant peoples, both those who belonged to the Russian Empire and those who lived in neighbouring China. Non-western objects were a common category in *Kunstkammern* and ever since the sixteenth century they had been sketched and their images had been incorporated in inventories and catalogues,⁸³ but that still fails to explain the almost comprehensive scope of the drawing activities in St Petersburg. On the basis of the drawings that have been preserved, we are given the impression that the museum cupboards were gone through object by object, and the same goes for the other categories of objects. The catalogues referred to above, on the other hand – with the exception of Seba's *Thesauri* and Andrea Vendramin's inventory in drawings (see note 83) – only provide illustrations of a selection of the objects present. If a catalogue of this kind was envisaged in St Petersburg, a few dozen drawings would have sufficed; there was no need for thousands of them. That large-scale approach can only be explained by a need to document the collection – that must have been the general aim. In addition there was a more specific aim, namely the production of prints that could be used for a variety of publications: albums with highlights from the collection, an illustrated catalogue, the books of the members of the Academy and their articles in the Academy journal, the *Commentarii*. There are examples available of all these fields of application of the drawings, with the ex-

ception of the illustrated catalogue. It therefore looks as though the time has come to bury the catalogue thesis, unless we keep a final possibility open: did Schumacher or anyone else perhaps cherish the dream of a complete, multi-volume, fully illustrated catalogue? *The Thesauri* of Albert Seba, which reproduced all the objects in his cabinet, could have functioned as model for such a megalomaniac vision. In the light of the squabbling between the different levels of the Academy and the permanent shortage of funds, such a project would of course have been absolutely unrealistic. Nevertheless, the result would have been spectacular, not only in terms of volume, but also in terms of content. In particular, the section with the tools and costumes of Tartars, Tungusian and other Siberian peoples would have been one of a kind at the time. A printed museum catalogue with so many illustrations in these fields had never been seen before.

But the most likely hypothesis is that the idea was to produce a few albums with a representative selection of prints of the main groups of objects in the collection, that could serve as a visual supplement to the simple, prosaic summaries in the *Musei Imperialis Petropolitani [...]* of 1741-1745, and perhaps also to supplement another publication that had also been published by Schumacher in the meantime and that presented the *Kunstkamera* and the Academy of Sciences to the public as institutions with a history and as buildings with a special content.

THE REPRODUCTION OF INTERIORS OR WALLS

In the same period in which the MIP saw the light of day, the press of the Academy issued a book in folio format with twelve full-page prints that displays the characteristics of a historical guide: the *Palaty Sankt-Peterburgskoy Imperatorskoy Akademii nauk Biblioteki i Kunstkamery* ('The Chambers of the St Petersburg Imperial Academy of Sciences, the Library and the Kunstkamera'). The book went through a tumultuous publication history. Schumacher, who was also the author, had dedicated the first edition of 1741 to Anna Leopoldovna, who functioned for a brief spell as regent of the baby Tsar Ivan VII, and had represented her on the allegorical title page as Minerva welcoming Patriotism who leads a child (the Academy of Sciences) by the hand. After the next coup d'état, however, which brought Elizabeth Petrovna to the throne in the same year, the exemplars already in circulation had to be intercepted in all haste. Since Schumacher himself then became the victim of a conspiracy, the book could not be published until after his rehabilitation in December 1743, with a new dedication.⁸⁴ A Russian, German and Latin edition of this publication are known,

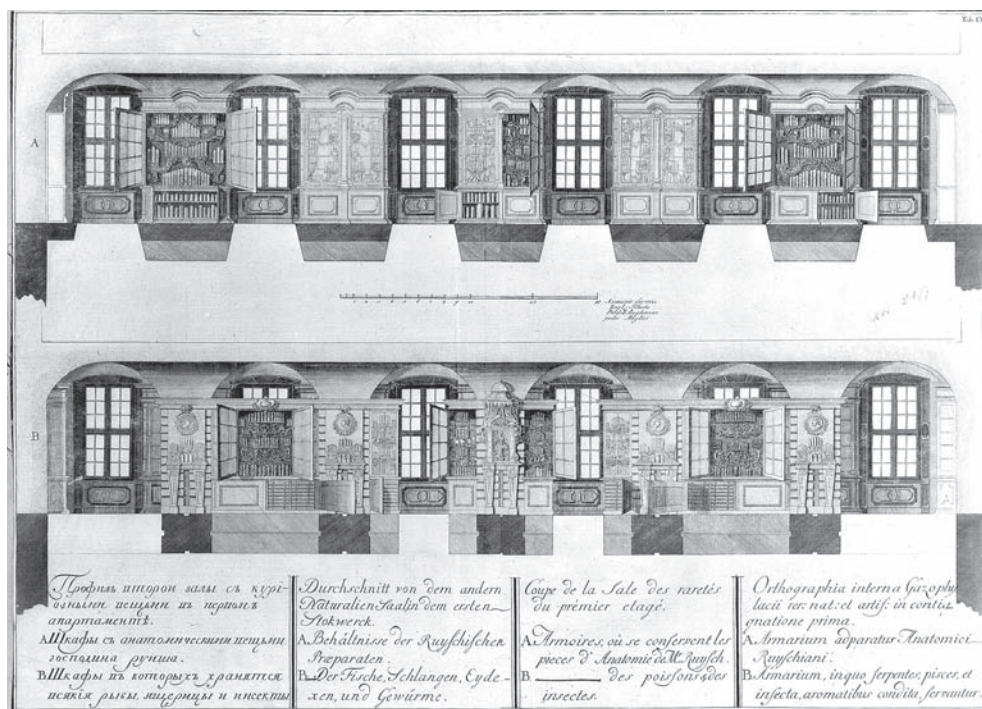
84. Werret 2000, pp. 130-132.
Safranovskii 1967. See also Black 1986, p. 88.

85. *Gebäude der Kayserlichen Academie der Wissenschaften, Bibliothec und Kunst-Cammer in St. Petersburg nebst einer kurzen Anzeige aller daselbst vorhandenen Kunst- und Natur-Sachen zum Gebrauch derjenigen, welche die Academie besuchen wollen*, St Petersburg [1744]. *Conspectus ædium Imperialis Academiæ Scientiarum Petropolitane; nec non Bibliothecæ et Technophylacii; una cum summario indice rerum artificiosarum et naturalium ibi conservatarum, in eorum usus, qui ædes has invisere cupiunt*, St Petersburg [1744].
86. P.F. Scarabelli, *Museo ò galleria adunata dal sapere, e dello studio del Sig. Canonico Manfredo Settala*, Tortona 1666. G. de Sepi, *Romani Collegii Societatis Jesu musæum celeberrimum*, Amsterdam 1678.
87. Claude Du Molinet, *Le Cabinet de la Bibliothèque de Sainte-Geneviève*, Paris 1692 (4 plates of the four walls and 38 plates with the most important naturalia and antiquities). One of the few earlier examples is the wall cabinet illustrated in the inventory in drawings of Vendramin dating from around 1615-1629. See Logan 1979, fig. 12.
88. De Montesquiou-Fezensac and Gaborit-Chapin 1977, figs. 1-5.
89. Jean-Baptiste Courtonne, *Dessins du Cabinet de M. Bonnier de la Mosson* (eight drawings from 1739-40, forming a total of 10 metres in length, that show the walls of eight of the nine rooms of this anatomical and physical cabinet. Exh. cat. Paris 1997). Benedetto Vincenzo de Greyss, *Galleria Imperiale di Firenze* (107 drawings of the painting and sculpture rooms and galleries in the Uffizi, first begun in 1748 and still continued after 1765, was probably intended to be published as an album of prints, though this never took place. See Heikamp 1969. On Vincent see note 75 and Exh. cat. Amsterdam 1992a.

but the fact that the inscriptions to the engravings are in four languages suggests that a French edition was also planned.⁸⁵ Both this plurality of languages and the subtitle of the 1744 edition ('for visitors to the Academy') indicate that the publisher wanted in the first instance to appeal to a wider public that was also expected to visit the buildings of the Academy in person. The content conveys a surprisingly modern impression too. The text provides a brief history of the Academy, the museum and the library before listing the rooms with a short account of their function and content. The twelve engravings represent the buildings in question by means of ground plans, vertical elevations, cross-sections and views of the rooms, while a map of the city indicates their position in St Petersburg. (ill. 9, 10 and 11. Introduction ill. 4 and 7) Another striking feature is that, besides the large folio format edition, which was intended as a gift to arouse above all international interest in the Academy, an edition in quarto format that visitors could easily carry around with them was published in 1744. Such a form of publication in different gradations of sumptuousness has already cropped up in connection with catalogues.

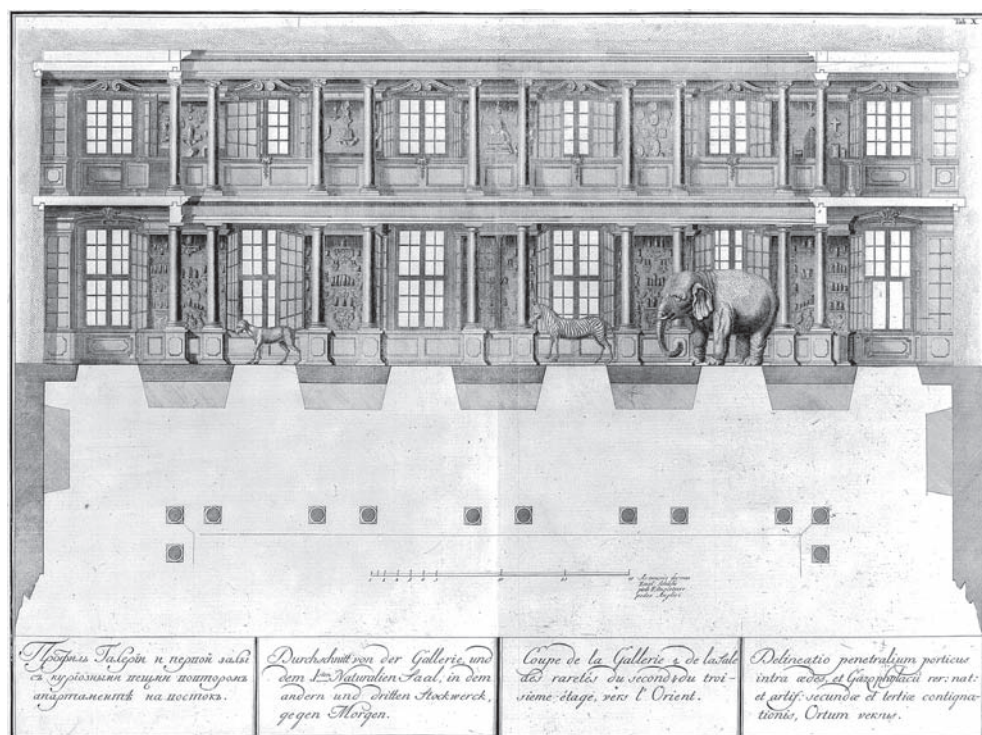
The visual material in this guide of 1741/44 followed a trend that could be seen in other parts of Europe. This concerned a matter-of-fact form of information that was clearly intended as a realistic representation of what awaited the visitor inside. We find representations of interiors as title prints of catalogues or descriptions of collections already in the early seventeenth century, but they tend to be allegorical or idealising in nature, such as the megalomaniac halls that were supposed to represent the museums of Manfredo Settala or Athanasius Kircher.⁸⁶ Realistic views of rooms, on the other hand, of which the St Petersburg prints are an example, only begin to appear towards the end of the seventeenth century. An early example is Claude Du Moulinet's catalogue of the cabinet in the Bibliothèque de Sainte-Geneviève of 1692.⁸⁷ A slightly later example concerns, interestingly enough, the collection of another ecclesiastical institution: the treasury of St Denis in North France, illustrated by André Félibien in 1706.⁸⁸

Such images show the individual cupboards or the walls and ceilings of a gallery or cabinet. The intention is that the image should correspond to the room in question, and that the objects on display there are visible as they were in their three-dimensional setting. They may take the form of a few individual drawings (Courtonne 1739/40), of dozens of drawings that point to the preparations for a printed book (De Greyss 1748- after 1765), or of a printed publication (Vincent 1715).⁸⁹

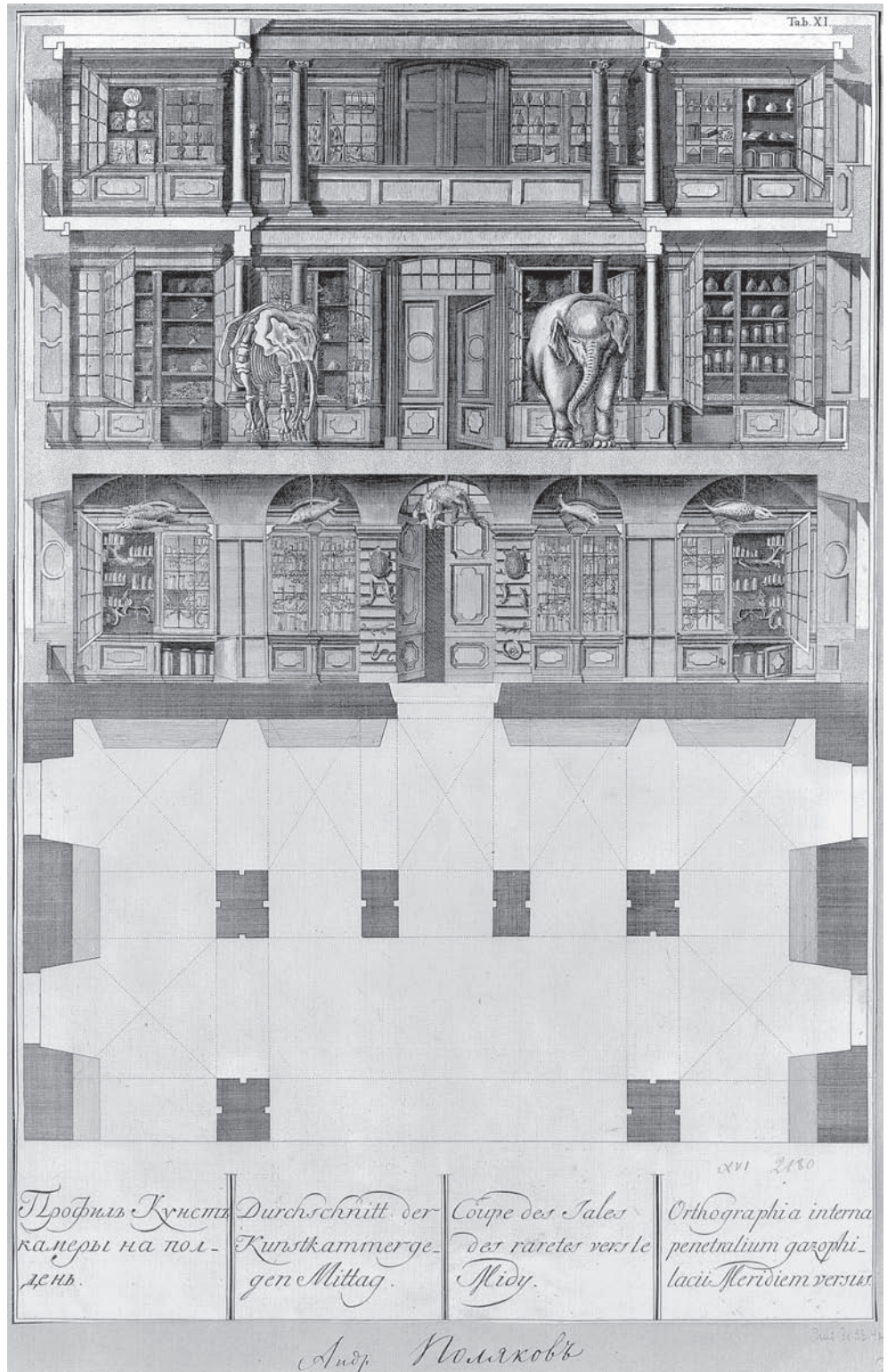


ill. 9. Ivan A. Sokolov, View of two walls with cupboards in room 00 on the first floor of the Kunstkamera, where the human and animal specimens from the collections of Frederik Ruysch and Albertus Seba were kept. Engraving from: *Palaty*, St Petersburg 1741, Tabula IX.

ill. 10. Christian Albrecht Wortmann, Longitudinal section of the second and third floors of the Kunstkamera. Engraving from: *Palaty*, St Petersburg 1741, Tabula X.



ill. 11. Andrey Polyakov, Cross-section of the three floors of the Kunstkamera, looking towards the south. Engraving from: *Palaty*, St Petersburg 1741, Tabula XI.



The specific character of the St Petersburg publication is further accentuated by the fact that the views of the rooms are backed up with architectural information in the form of ground plans and vertical elevations, a combination that had not been common before. Taken as a whole, this publication offers so much information that, in combination with the printed catalogue of 1741-1745 and the thousands of drawings of the objects, it makes it possible to reconstruct the arrangement of the *Kunstkamera* and the interior of the Academy building.⁹⁰

Finally, yet more drawings were made and kept in St Petersburg that showed the two buildings of the Academy and the collections displayed inside them. The first two boxes of the 'Icones pictæ' consist of 'Delineationes Architectonicæ, Aedium Academicarum et Technophilacii', according to the list in the MIP summing up all the boxes. It is no longer possible to form an accurate picture of their contents, but it is not unlikely that the drawings of various cupboard arrangements, published in the exhibition catalogue *Peter de Grote en Holland* formed a part of them.⁹¹ It is also probable that these boxes contained the (no longer extant) preliminary drawings for the prints on which the guide of 1741/44 and its de luxe folio edition were based.

Conclusions

Now that we have formed an impression of the genre of the paper museum as an international phenomenon with its various categories, it becomes easier to characterise the drawings in the St Petersburg corpus. This real paper museum does have many points in common with what was being produced elsewhere in Europe in this field, but it is different in two important respects. First of all, a whole infrastructure had to be created before the production of the drawings and prints could get under way – two processes that were carried out within a relatively brief space of time. Second, a striking feature is the drive to comprehensiveness that can be seen in the drawing and publishing activities, with regard to both the types of objects illustrated and the sub-genres of the paper museum.

In the course of the few decennia between 1723 (the contract of Maria Dorothea Gsell) and around 1760, such a concentrated attempt to catch up took place that the European models were actually surpassed. The result was that in St Petersburg practically *every* part of the collection and the *entire* field of the sub-genres discussed above were covered. There is no parallel for this anywhere else, not even in Colbert's France. The corpus of the 58 boxes whose contents were listed in the catalogue *Musei Imperialis Petropolitani [...]* of 1741 (plus

90. See the contribution by Van de Roemer to Meijers and Van de Roemer 2003, pp. 173-182.

91. See Meijers 1996, figs. 13-16. Since there is not yet enough known with certainty about its composition, the category of architectural drawings is not taken into account in the present publication.

the additions that were made after its publication) formed a link between the two other variants of the genre that have been charted here: the virtual paper museum and the representation of interiors or walls. A clue in this direction is provided by the fact that our 'Icones pictæ rerum, quæ in Academiae thesauris insunt' formed a category within the wider field of 'Picturæ', which included paintings, loose and bound watercolours and printed albums of plates. Together with the prints and illustrated books that were kept in the library, that visual material formed a virtual paper museum that supplemented the collection of objects. To that we can add the drawings made during expeditions or in connection with other research activities, such as anatomy sessions, and which were incorporated in the Archive of the Academy.

Nor can the production of our corpus be seen in isolation from the third category of paper museum, the representation of interiors or walls. Both the first two boxes of the 'Icones pictæ' and a separate publication, the *Palaty* of 1741/44, were dedicated to the buildings of the Academy and the *Kunstkamera*-cum-library and their interior. What is particularly striking about this publication is its realistic and informative character. Moreover, it is noteworthy how an appeal was made to different target groups by issuing the same publication in different formats and degrees of sumptuousness.

In short, within the field of the paper museum, the Academy of Sciences in St Petersburg overshadowed the other European centres of power by making good its backwardness in record time and scoring on every front. This becomes all the more remarkable if we include the 26 prints that point to plans for an album with highlights of the collection or, as is sometimes claimed, an illustrated catalogue.

This catalogue thesis should be confronted with a further aspect by which the drawing activities in Russia differ from the European examples: the urge towards completeness. The extant drawings give the impression that the cupboards were processed one by one, and every single item in the collection was eligible to be drawn, however humble or damaged it might be. This would mean that originally far more than the existing 2,000 leaves were made or planned. A project to record a collection on this scale has few counterparts in Europe. In most other cases there was a strict selection right from the first, at least to judge from the extant drawings and the number of engravings with which the catalogues of the collections in question were illustrated. The exceptions are a few Italian private collectors, who created a full inventory in drawings (Manfredo Settala, Andrea Vendramin), and the Amsterdam apothecary Albert Seba, who even had a complete visual record of his collection made in engravings.

Selection did not get under way in St Petersburg until it was decided to make prints from a number of drawings. That is why the existence of these 26 prints only helps to account for one of the functions of the corpus of drawings. Were they intended for an illustrated catalogue? At any rate, it is clear that the entire corpus of drawings, and thus the prints made from a selection of them too, was related in some way to the museum catalogue that was lacking in illustrations. The systematic arrangement of the boxes corresponded more or less to the arrangement of the objects in the catalogue, which in turn followed their arrangement in the *Kunstkamera* and the adjacent building of the Academy of Sciences. A reference to the numbers in the catalogue was added to a large number of the drawings during or soon after their creation. So the collection, catalogue and drawings were connected with one another, but the frequently repeated thesis that the corpus of drawings was made for an illustrated catalogue seems debatable. The scale of the number of drawings was too enormous for that. Such catalogues rarely had more than about 35 plates (with the exception of Seba's *Thesauri*). The selection that was made for the prints (the Siberian objects and memorabilia) points instead in the direction of an album of plates with highlights, a genre of publication that was current in Europe too, rather than to an illustrated catalogue.

It is probable that one of the reasons for the large scale of the drawing activities of the objects in the *Kunstkamera* lay in the specific situation in which Russian culture found itself in the first half of the eighteenth century. Unlike the rest of Europe, the completely different orientation of Russian visual culture and the lack of a scientific practice based on the study of objects meant that during the preceding centuries there had been no steady growth in the formation of a stock of visual material that could be used for scientific research and as illustrative material for publications. Nor was there a culture of collecting that went back centuries. If these gaps were to be bridged quickly, it was only natural to draw the collections of the Academy of Sciences. Furthermore, and for the same reason, the production of drawings of the objects in the *Kunstkamera* had a didactic function in Russia. The drawing activities were an integral part of the training for draughtsmen and engravers that was provided by the Academy of Sciences – a construction without parallel elsewhere. In this way drawing the objects in the *Kunstkamera* served two ends: the pupils could gain practical experience, and a corpus of images was created at the same time. This didactic function is connected with the organisational form of Russian scientific and cultural life, which all fell beneath the central authority. With the exception of a couple of artists who also ran their

own studio, the Academy of Sciences had a monopoly of all activities. For centuries the other European countries had been familiar with the phenomenon of individual painters, draughtsmen, engravers and printers to whom this work had been contracted out and who also trained apprentices in their studio. In St Petersburg, on the other hand, that stratum of independent artists and craftsmen was almost non-existent; everything was done inside the Academy, down to the sale of the prints and books that were produced there.

Within the framework of the catching up operation that took place in Russia, every administrative level was aware of the importance of collections and of the enormous potential of the new art of drawing, engraving and printing.⁹² They all converged in the paper museum.

92. Cracraft 1997.

THE ART CHAMBERS OF
THE ACADEMY OF SCIENCES
OF ST PETERSBURG AND THE
MAKING OF THE DRAWINGS
OF THE KUNSTKAMERA
OBJECTS

Elena S. Stetskevich

Between c. 1735 and 1760, a large number of drawings was made at the Academy of Sciences in St Petersburg, of which more than 2000 have been found so far. The drawings depicting practically the entire collection of its museum, the *Kunstkamera*, were done by artists and employees of the Academy Workshops for Engraving, Mapmaking and Toolmaking. (These were called ‘Palaty’ or ‘Chambers’ in the eighteenth century.) While the Academy of Sciences employed professional artists practically from the start in 1724, this group of workshops was set up in the late 1720s and the early 1730s. The organization of the workshops was dictated by the needs of the Academy of Sciences, both for research and publishing. This also applied to the special Drawing Workshop set up in 1738.

This article will show how and why these workshops originated and their place within the Academy of Sciences, which in addition to the *Kunstkamera* included a printing house cum bookshop, a grammar school and a university. Special attention will be paid to the project known as the ‘paper museum’.

Drawing education in Russia before c. 1725

The reforms of Peter the Great during the first quarter of the eighteenth century resulted in a rapid development of the sciences, the arts, literature and education. Painters, draughtsmen, engravers and architects were in demand and various methods of training students in the arts were used, such as establishing scholarships for students to train in the most important European centres or, according to the tsar’s special decrees, apprenticing Russian students to visiting European artists.

In the early eighteenth century, drawing became a compulsory subject in the curricula of many educational institutions in Russia, e.g. the Naval Academy and Archbishop Feofan Prokopovich’s school for orphans. This was particularly necessary in Russia as the western tradition of painters, printmakers and sculptors training apprentices in their own workshops was virtually non-existent. There were no artists working for themselves; they were all in the service of the tsar. As long as the court was in Moscow, i.e. until 1712, they were appointed by the Armoury Chamber where apprentices were also trained. This Chamber did move with the court to St Petersburg (and was then known as the Armoury Chancellery) but the mode of operation was no longer satisfactory. Peter’s ambition to introduce the Western European culture of imagery made educational reform necessary.

Since drawing is the basis of the art of engravers, sculptors and



ill. 1. Drawing from life. Mid.-18th c.
Pencil, charcoal and white chalk.
Archives of the Russian Academy of
Sciences (St Petersburg branch). f. IX,
op. 3, no. 38, leaf 1

painters, collective drawing classes were suggested. Mikhail Petrovich Avramov, head of the Armoury Chancellery just mentioned, started these classes at the Printing House of St Petersburg, which had been established in 1711. A painter of the Armoury Chancellery, Ivan Adolsky, taught 'copying originals'. In other words, engravings by leading European masters were used as ideal models and nudes were also drawn.¹ (ill. 1) In 1715 Peter the Great visited the drawing classes and attended a class in drawing from life with the students.²

In the early 1720s, the idea of creating an Academy of Arts in Russia was put forward. The organizers of the first projects were Avramov (mentioned above) and, moreover, Andrey Nartov, a talented mechanic who was the turner of Peter the Great and head of the tsar's lathe shop in the Summer Palace. Both men were highly educated, had visited Western Europe and were familiar with the history of Europe's most important art centres. When the Armoury Chancellery was disbanded in 1721, Avramov suggested that an Academy for the study of drawing, painting and other arts should be set up at the Synod Printing House.³ Another plan dating from December 1724 was by Andrey Nartov for an 'Academy of the different arts' and was to include classes on civil architecture, mechanics of mills and sluices, painting, sculpture and engraving. This Academy was also to include a printing house for books and engravings.⁴ A year earlier, in 1723, the French painter Louis Caravaque who had worked at the Chancellery of Construction submitted to Peter the Great his proposal for an Academy of the Art of Painting. Caravaque's proposal was based on his experience of the French Academy of Painting and Sculpture and was hence clearly different to the more artisan-oriented plans of Avramov and Nartov.⁵

The proposals did not escape the attention of the tsar, who in 1724 wrote a memorandum including a list of the arts to be developed in Russia. In addition to painting, sculpture, engraving and architecture, it included carpentry, lathing, toolmaking, metal working and watch making.⁶ The list shows that the term 'arts' was used fairly loosely in the first half of the eighteenth century.

The foundation of the Academy of Sciences in 1724 and the appointment of draughtsmen and engravers

During the same period that these plans for an Art Academy were developing, the circles close to Peter the Great were discussing proposals for creating an Academy of Sciences in Russia. Remarkably, from the very beginning this was to be an institution where the arts (in the

1. See Moleva and Belyutin 1956, pp. 15-16; Alekseeva 1990, p. 164.

2. Moleva and Belyutin 1956, p. 16.

3. Gavrilova 1971, p. 221; cf. Cracraft 1997, p. 237.

4. *Materialy* 1885-1900, vol. 1, pp. 76-79.

5. Gavrilova 1971, pp. 223-225; Cracraft 1997, p. 237.

6. *Materialy* 1885-1900, vol. 1, pp. 66-67.

broadest sense of the word) could be practised. According to the letters dating from 1720-1721 of Laurentius Blumentrost, later the President of the Academy of Sciences, librarian Johann Daniel Schumacher and philosopher Christian Wolff, the idea was to make the Academy an institution with the goals of both developing the sciences and the arts and educating young people in them.⁷ In January 1724, the Senate approved the *Proposal for the Establishment of the Academy of Sciences and Arts*, as it is referred to in the literature. According to today's scholars, the *Proposal* reflects the ideas of Peter the Great and his associates. In all probability, Blumentrost was the author.⁸ The *Proposal* stressed that 'a foundation has now been laid for the development of the arts and sciences in Russia'.⁹ For this purpose, the Academy of Sciences was to incorporate a university, a grammar school and a library, as well as the first public museum, the *Kunstkamera*, established in 1718. The collections of the latter were already considerable at the time. Unlike other European countries these organizations were all part of the Academy of Sciences, which in turn was a direct political instrument of the tsar. In that sense the Academy was no different to its European equivalents.

According to the *Proposal*, the staff of the Academy of Sciences was to include a painter and an engraver who were to be involved in publishing.¹⁰ More particularly, their responsibilities were to make illustrations for the Academy's publications and engrave them for the printed editions. Besides, both were to give the Academicians whatever assistance within their capabilities.¹¹ The Academy did indeed begin to employ painters and engravers from 1724 onwards.

Maria Dorothea and Georg Gsell were the first to be hired by the Academy. Both had come to St Petersburg in 1717 at the invitation of Peter the Great, whom they had met in Amsterdam. Maria Dorothea was the daughter of the artist and naturalist Maria Sibylla Merian, who was well known for her faithfully depicted and artistically perfect drawings of herbs, flowers and insects, as well as for her entomological collection from Surinam. Maria Dorothea Gsell used watercolours and had experience of working with natural-history collections. Her husband Georg had been educated in Vienna and had worked in Holland, where in addition to painting, he was involved in art dealing.¹² By the time he moved to Russia, he had become well-known for his portraits and still-lives.

In December 1723 Maria Dorothea Gsell received (from Blumentrost) Peter the Great's order to 'work at the *Kunstkamera*, make copies of its objects in watercolour, properly done and decorated'. For this purpose, the artist submitted an application to His Imperial Majesty's

7. For details, see Kopelevich and Nevskaya 2000, pp. 23-25, 31; cf. Cracraft, p. 237.

8. Kopelevich and Nevskaya 2000, p. 25.

9. *Materialy* 1885-1900, vol. 1, p. 15.

10. *Materialy* 1885-1900, vol. 1, p. 19.

11. *Materialy* 1885-1900, vol. 1, p. 25.

12. Levinson-Lessing 1985, p. 39; Moleva and Belyutin 1965, p. 196.

13. *Materialy* 1885-1900, vol. 1, pp. 12-14.

14. *Materialy* 1885-1900, vol. 1, p. 34.

15. *Materialy* 1885-1900, vol. 1, pp. 33-34, 93.

16. Alekseeva et al. 1985, p. 53.

17. Malinovsky 1990a, vol. 1, p. 49.

18. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f. 3, op. 1, no. 2, 2.

19. *Materialy* 1885-1900, vol. 1, pp. 320-321; on the date of the document see Kopelevich 1977, pp. 83-86.

20. *Materialy* 1885-1900, vol. 1, p. 171.

21. Kopelevich 1977, pp. 99-100.

22. *Materialy* 1885-1900, vol. 1, p. 232.

23. For details see Stetskevich 1997, pp. 249-250.

Cabinet for the purchase of parchment, paper, watercolours, gold leaf, pencils, brushes, etc.¹³ The parchment for the drawings was to be produced in 1724 at the ‘parchment mill’ of the Admiralty, where the work was to be supervised by the artist.¹⁴

Maria Dorothea Gsell became the first artist to draw the objects in the *Kunstkamera* collection. Unfortunately, our knowledge of her work is scanty. In 1724, she took ‘young Hendrich and Johann Friedrich’ as apprentices to teach them the skills she possessed. In all probability, their apprenticeship did not last long; nothing is known about their subsequent career.¹⁵ She is reported to have painted in 1728-1729 ‘various rare birds in the *Kunstkamera* [collection]’ and illuminated the engravings for *Plantarum minus cognitarum [...]*. *Centuria I* by the botanist Johann Christian Buxbaum who had travelled in Greece and Asia Minor.¹⁶ According to the first historian of Russian art, Jakob Stählin, a member of the Academy and Maria Dorothea’s contemporary, she ‘created a number of excellent pictures for the Academy, which are preserved in the Academy library and the *Kunstkamera*, in addition to the collection of the most beautiful originals by her mother’.¹⁷ However, works signed by Maria Dorothea have not been preserved.

Georg Gsell’s name is found in Academy documents, the first instance being in 1726.¹⁸ According to the 1725 *Proposed Regulations of the Academy of Sciences*, an Academy of Arts was to be established within the Academy of Sciences, which was to be attended by those incapable of or unwilling to go to university. Four artists were to teach classes on (1) arithmetic, geometry, perspective and military architecture, (2) civil architecture, (3) painting and (4) sculpture, carving and modelling.¹⁹ Georg Gsell is mentioned in the advertisement placed in the *St Petersburg Chronicle* as one of the four teachers who, in accordance with the *Proposed Regulations*, were to teach ‘arts useful in human life’.²⁰ Initially, of all the different arts only drawing was taught regularly and this was at the Academy grammar school.²¹

The contract between the Academy of Sciences and Georg Gsell dates from January 1727. Besides teaching drawing classes at the grammar school his responsibilities included, for which he was paid separately, teaching several pupils at his studio at home, as well as ‘painting and drawing whatever the Academy finds necessary’,²² like making sketches in the dissecting room of the *Kunstkamera*. Gsell also did a number of paintings for the *Kunstkamera* collection.²³

Among those who went to the Gsells’ home studio were Feodor Cherkasov, Andrey Grekov, Pyotr Pagine, Mikhail Nekrasov and Ivan Shereshperov. All of them, except Pagine, were involved from

about 1732 in making drawings of objects in the *Kunstkamera* collection. Andrey Grekov (whose father was a Greek galley captain) had been apprenticed to Andrey Matveyev before entering the Academy. Matveyev was a talented artist who had been one of the first students sent to Holland at the expense of the Government. In 1729 Grekov applied to become a student of ‘whatever art the Academy deems appropriate’.²⁴ Matveyev had studied in Holland and knew Gsell – they had worked together on SS Peter & Paul’s Cathedral. It is possible that Matveyev suggested to Grekov that he should apply to the Academy, which resulted in him becoming the German-Dutch master’s apprentice.

In addition to working and learning at the Gsells’ workshop, Andrey Grekov was attending German classes at the Academy grammar school. In March 1732, at the order of Johann Daniel Schumacher, he was transferred to the *Kunstkamera* where he was to supervise the anatomical and zoological collection.²⁵ This was to mark the end of Grekov’s period of training. From then on, his main responsibility was supervising the collections of the museum, although he continued to be listed as an ‘apprentice of the art of painting’ in the Academy rolls. He did the earliest of the extant drawings of *Kunstkamera* exhibits.²⁶ In 1737, having passed an exam set by Gsell, he was promoted to assistant-artist. His salary was raised but at the same time, he received an instruction ‘to carry out his duties at the anatomical collection of the *Kunstkamera* with zeal, working even harder than before’.²⁷ He made drawings of both the collection of the museum and anatomical specimens for the professors of anatomy, Josiah Weitbrecht and Abraham Kaau-Boerhaave. The records in the archives include plenty of Grekov’s orders for pencils, brushes, paints and paper for drawing ‘various curiosities’.²⁸ In 1743, without leaving his position at the museum, Grekov started teaching drawing at the Academy grammar school. In 1750, he was appointed teacher of drawing at the Academy university, although he continued to make anatomical drawings for Kaau-Boerhaave.²⁹

At the Academy, both the students’ and teachers’ activities were strictly regulated. For example, Maria Dorothea and Georg Gsell were to ‘show zealous enthusiasm in passing on their knowledge to their pupils, concealing no aspects of their art’.³⁰ The masters were to support the students, providing them with paints and other materials. When necessary, the students were dealt with harshly, as Cherkasov’s case shows.

Femodor Cherkasov had studied painting and drawing in Italy. In 1723, having returned from his government-sponsored trip, he

24. *Materialy* 1885-1900, vol. 1, p. 489.

25. SPBARAN, f. 3, op. 1, no. 5, 204; *Materialy* 1885-1900, vol. 2, pp. 484-485.

26. SPBARAN, f. IX, op. 4, nos. 272, 273, 706, 714.

27. *Materialy* 1885-1900, vol. 3, pp. 520-521.

28. SPBARAN, f. 3, op. 1, no. 102, 8; no. 141, 368; *Materialy* 1885-1900, vol. 4, p. 486.

29. SPBARAN, f. 3, op. 1, no. 185, 296.

30. SPBARAN, f. 3, op. 1, no. 5, 274 (obverse and reverse).

became a pupil of Johann Gottfried Tannauer. In 1729, when he applied for a position as drawing teacher at the Academy grammar school, Johann Daniel Schumacher demanded that his skills were to be tested. He then was commissioned to draw the *Kunstkamera* exhibits whilst also attending Gsell's classes.³¹ Cherkasov's status at the Academy was that of an apprentice of the art of drawing.³² However, he 'turned out to be lazy, not fulfilling the duties assigned to him, but taking to drink instead'. In the same year (1729), he was dismissed.³³

The establishment of the Academy Printing House and the Art Chambers

In October 1727, the Academy of Sciences became entitled to publish all books, except ecclesiastic and legal works.³⁴ At the same time, the Printing House of St Petersburg was closed and the equipment used for printing civic publications (i.e. all non-religious publications) transferred to the Academy of Sciences. In addition to scientific literature, the new Academy Printing House published textbooks, calendars and fiction, as well as the newspaper the *St Petersburg Chronicle*. In order to provide for the large-scale printing activities, several art workshops, so called 'Art Chambers' for Type making, Engraving and Binding were founded in the late 1720s. They were connected to the Academy Printing House. Another group of art workshops, set up at the same time, stemmed from the growing demand for instruments necessary for the experiments to be carried out by the members of the Academy who had arrived in St Petersburg. These included Optic, Lathing, Metalworking and Toolmaking Workshops. These art workshops collectively formed a single network supporting the Academy's activities.³⁵ When the term 'arts' is used in this connection, it thus means 'the useful arts'.

The development of the Engraving Chamber or Workshop was especially rapid, since the majority of the Academy's publications were illustrated. As early as 1727, there were nine engravers, including the engraver of maps and letters Georg Johann Unverzagt, portrait engraver Christian Albrecht Wortmann and the cityscape and architecture engraver Ottomar Elliger. Moreover, engravers who had formerly worked at the Printing House of St Petersburg were now also on the staff of the Engraving Chamber.³⁶ In the early 1730s, two other workshops were founded, one for Printing and one for Mapmaking.³⁷

Almost immediately, the masters in the workshops began to appoint apprentices. Since there were no formal regulations concerning the status of the workshops, only those essential to the activities of the

31. *Materialy* 1885-1900, pp. 484, 559.

32. SPBARAN, f. 3, op. 1, no. 5, 382 (obverse and reverse).

33. *Materialy* 1885-1900, vol. 1, pp. 473, 559.

34. Kopelevich 1977, p. 113.

35. Breneva 1999, p. 6.

36. Alekseeva *et al.* 1985, pp. 9, 52, 73.

37. Alekseeva *et al.* 1985, p. 12.

Academy of Sciences were paid, i.e. the tool and type makers, printers and engravers. By 1730 fifteen apprentices in the arts were working for the Academy of Sciences.³⁸ In addition, the lessons that the Gsells had been giving at home for some years continued as usual.

It is not surprising that the Academic Printing House and the workshops made heavy demands on the budget of the Academy of Sciences. Increasing the allowances of the workshop masters in combination with Schumacher's authoritarian behaviour – he was practically the absolute ruler of the Academy in the 1720s-1730s – met with the opposition of the members (the professors) of the Academy. The members rightly pointed out that the unfavourable financial situation of the Academy was not only due to the increased wages of the Academy's personnel but also to the amount of work they were supposed to do.

In September 1733 a special meeting was called by Hermann Karl von Kayserling, President of the Academy, to discuss the most critical problems, such as whether the Academy of Arts (i.e. the arts division collectively comprising the Art Chambers) was a necessary part of the Academy of Sciences, in what way it could be useful to the State and how it should be financed. All the members of the Academy were unanimous that the arts division was necessary but were against the reliance of both the arts and the sciences on the one limited budget of the Academy of Sciences. Some proposed separating the two Academies, the most outspoken proponent of this idea being the astronomer and geographer Joseph Nicolas Delisle. He was supported by the anatomist Johann Georg Duvernoi but the majority regarded both academies being part of one and the same organizational structure to be of mutual benefit.³⁹ After the meeting, a request was sent to the Senate for a subsidy to cover the Academy's debts, to which the Senate reacted positively.⁴⁰

It was Baron Johann Alfred Korff, head of the Academy of Sciences from 1734, who expressed the position of the Academy authorities in this conflict. In his reply he reacted to those who argued that European academies did not include typographic and other art workshops. In a memorandum on the Academy's status, he wrote that in Paris, London and Berlin, 'there are plenty of craftsmen and artists, while we cannot boast of the same here.'⁴¹ In other words, the fact that there were practically no master craftsmen and artists working independently in Russia at that time, i.e. outside the Academy of Sciences, was responsible for the organization of the art workshops as a division of that institution.

38. At the time, the toolmaker, type maker, letter maker, engraver, and G. Gsell had six, four, one, three and one students respectively, see *Materialy* 1885-1900, vol. 1, p. 651.

39. For details of the meeting see Pekarsky 1870-1873, vol. 1, pp. 1-11; Kopelevich 1977, pp. 124-126; Gavrilova 1973, p. 68.

40. Kopelevich 1977, p. 126.

41. Kolchinsky 2000, p. 41.

42. Alekseeva et al. 1985, p. 10.

43. *Materialy* 1885-1900, vol. 2, p. 586.

44. See, for example, SPBARAN, f. IX, op. 4, nos. 149, 152, 184, 198, 200, 269, etc.

45. *Materialy* 1885-1900, vol. 5, p. 263, vol. 7, p. 10.

46. *Materialy* 1885-1900, vol. 7, p. 980; SPBARAN, f. 3, op. 7, no. 95, 23-26.

47. *Materialy* 1885-1900, vol. 3, pp. 322-323.

48. *Materialy* 1885-1900, vol. 3, p. 378.

49. *Materialy* 1885-1900, vol. 4, pp. 155, 220; vol. 5, p. 29.

50. *Materialy* 1885-1900, vol. 5, p. 61.

51. *Materialy* 1885-1900, vol. 4, p. 220.

52. SPBARAN, f. I, op. 20, no. 25, 30, 52-53; f. IX, op. 8, no. 185, p. 1.

53. SPBARAN, f. 3, op. 1, no. 99, 144.

As a result of the subsidy from the Senate, the number of apprentices at the Academy of Sciences, in particular those studying at the Engraving Chamber, increased in the 1730s.⁴²

For example, Yakov Nechaev was apprenticed to Andrey Grekov in 1735. Until noon, he attended classes at the grammar school, after which Grekov taught him to 'draw objects of the *Kunstkamera*' and to 'look after the collection'.⁴³ Nowadays, Nechaev's signed watercolours are preserved in the Archives of the Russian Academy of Sciences (St Petersburg Branch).⁴⁴ Hence it was in the Engraving Chamber that students like Nechaev learned to draw. However, when a special Drawing Chamber was founded in 1738 (more information about this is given below), he continued his training there and according to the workshop master Johann Elias Grimmel was the best of his draughtsmen.⁴⁵ In 1743 Nechaev was transferred, against his will, to the Heraldry Office, which was then involved in making emblems for the Lifeguard company. He worked there for over thirty years before he retiring at the rank of lieutenant and drawing master.⁴⁶

Three other pupils arrived in 1737 who had participated in the Orenburg expedition, namely Mikhail Nekrasov, Ivan Shereshperov and Andrey Malinovkin.⁴⁷ They were to study drawing (under Christian Wortmann, master of the Engraving Chamber) and painting (under Gsell) as well as attending German and Latin classes at the grammar school.⁴⁸ Later on, Nekrasov and Shereshperov were apprenticed to Gsell, while Malinovkin was admitted to the Engraving Chamber.⁴⁹ Under the terms of the contract that the Academy of Sciences made with Gsell in 1739, the pupils from Orenburg were to learn oil painting and watercolour drawing in three years. They were to 'learn the art of watercolour drawing and draw animals and birds, as well as various botanical herbs, and also paint landscapes and maps in oils, and whatever is relevant to these'.⁵⁰

Little is known about the Gsells' methods of teaching. Georg's students knew how to ground canvas and probably were able to paint in oils. In 1739, Nekrasov and Shereshperov reported to the Chancellery of the Academy of Sciences: 'We, the humble ones, are being apprenticed to the master of painting Gsell, fulfilling the assignments of the Academy, in accordance with his instructions'.⁵¹ Maria Dorothea Gsell was teaching them to work in watercolours, apparently with good results, judging by the quality of Nekrasov's and Shereshperov's drawings, now in the Archives of the Russian Academy of Sciences (St Petersburg Branch).⁵² One way of learning was copying; it is known that Nekrasov was copying Merian's works in the Academy of Sciences.⁵³

In 1745, in his application to the Academy Chancellery for promotion from apprentice to assistant, Shereshperov enumerated all the aspects of the trade he had had to deal with, viz. ‘illuminating [engravings of] herbs and patents, drawing *Kunstkamera* exhibits in pencil and water-colour, grounding canvas and painting [walls in] the Conference room, illuminating pages of *The Book of Coronation*, etc.’⁵⁴ After George Gsell’s death in 1740, Nekrasov and Shereshperov remained under Maria Dorothea Gsell’s supervision for several months until they were transferred to the Drawing Chamber.⁵⁵

54. *Materialy* 1885-1900, vol. 7, p. 685.

55. *Materialy* 1885-1900, vol. 4, p. 564.

Plans for an illustrated catalogue

The second half of the 1730s was characterized by the draughtsmen’s increased activities, probably in connection with the catalogue of the *Kunstkamera*, for which they were making drawings of the exhibits. This activity is generally considered to have been prompted by the 1727 order of the young emperor Peter II to have a catalogue of the *Kunstkamera* collection published in Russian with engraved illustrations.⁵⁶ This could not have been the only reason, however, for these activities. The drawing production was much more extensive than was required for an illustrated catalogue, especially when you consider that the 2000 or so sheets that have been preserved were only part of the original collection. But whatever the situation was, Johann Daniel Schumacher, the compiler of the first catalogue of the collections *Musei Imperialis Petropolitani Vol. 1-II* from 1741-1745, played an important role in making the drawings. Schumacher was secretary to four successive Presidents and councillor of the Chancellery of the Academy of Sciences from its foundation in 1724 to 1761, and in this capacity was responsible for all the activities of all the Art Chambers. Being at the same time curator and librarian of the museum, Schumacher was able not only to supervise the drawing activities, but also the instruction of the art students. On the orders of Peter the Great, Schumacher had visited France, Germany, Holland and England in 1721-1722, where he had familiarized himself with museums and libraries. He was without doubt the obvious person to compile the first catalogues of the collections of the *Kunstkamera* and the library.

56. *Materialy* 1885-1900, vol. 1, p. 295.

The project lasted for several years. In November 1732, the Senate carried out an investigation on the catalogues⁵⁷ and in January 1733 the Academy of Sciences reported back that the work on translating Schumacher’s manuscript had begun.⁵⁸ In the same years, the work on drawing the *Kunstkamera* exhibits started. Numerous drawings dating from 1735-1738 have been preserved. The drawings are signed by

57. Ostrovityaninov 1958-1964, vol. 1, p. 65; Kopelevich 1977, p. 121.

58. *Materialy* 1885-1900, vol. 2, p. 258.

the employees of the Academy Workshops: engravers Franz Bernz, Grigory Kachalov, Ivan Sokolov, Mikhail Makhaev, Andrey Polyakov, Phillipp Mattarnovy, Grigory Abakumov, Ottomar Elliger and Efim Terentyev; draughtsmen Andrey Grekov and Yakov Nechaev; and toolmakers Mikhail Semyonov, Pyotr Ermolayev and Stefan Nartov. The last three were pupils of Andrey Nartov, the head of the Tool-making Chamber and also, as mentioned above, the instigator of one of the earliest proposals concerning the foundation of an Academy of Arts in Russia. As well as being involved in producing the drawings of the *Kunstkamera* collections⁵⁹ Nartov's pupils later did the illustrations for his book *Theatrum Machinarum*.⁶⁰

All those involved in the project were experienced artists. Before joining the Engraving Chamber, Sokolov, Kachalov and Bernz had been Gsell's students at the Academy grammar school. Later on, they studied under Elliger. Unverzagt, Ermolayev and Semyonov, prior to being employed by the Academy of Sciences, had studied drawing at the Chancellery of Construction under the architects Domenico Trezzini and Mikhail Zemtsov.⁶¹ Nechaev, as mentioned above, had been apprenticed to Grekov, curator of the natural history collections of the *Kunstkamera*. It is therefore no wonder that drawings of the highest quality were the result of all this. Sokolov's, Kachalov's, Nechaev's and Grekov's watercolours, for example, were characterized by precise drawing and rich coloration that is still apparent today. The draughtsmen were taught to convey every detail of the objects they were depicting, as well as the colour, dimensions, material, painting or carving on them, etc. This could not fail to have an effect on their drawing technique. Hence this *Kunstkamera* project contributed to nurturing a new generation of Russian draughtsmen who could draw accurately and were able to fit in with the Western European tradition of imagery.

Unfortunately, the archival records available to us do not describe how the museum items were depicted in practice in the 1730s-1750s. All we know is that drawing classes took place in the Engraving Chamber in the afternoon.⁶² It is possible that drawings of the *Kunstkamera* objects were also done in this workshop, which was headed by Wortmann from 1735. In the 1730s and the first half of the 1740s, the Engraving and the Drawing Chambers occupied three rooms on the first floor of the main building of the Academy of Sciences (formerly the palace of tsarina Praskovya Feodorovna) located on the Neva embankment next door to the *Kunstkamera*.⁶³ (Introduction, ill. 1) The rooms are marked N, O and P on the plan in the album of engravings entitled *The Chambers of the St Petersburg Imperial Academy of*

59. See, for example, SPBARAN, f. IX, op. 4, nos. 595-598, 617, 620, 747, et passim.

60. Gize 1993, pp. 29-30.

61. Breneva 1999, pp. 78-81, 154, 164.

62. Breneva 1999, pp. 80-81.

63. SPBARAN, f. 3, op. 1, no. 8, 260 (reverse); no. 110, 128; *Materialy* 1885-1900, vol. 8, p. 181.

Sciences, the Library and the Kunstkamera, the *Palaty* published by the Academy of Sciences in 1741 and 1744. Drawing classes took place in the largest of these rooms.⁶⁴ In 1748 the Engraving and the Drawing Workshops were moved to similar rooms on the ground floor.⁶⁵ (ill. 2)

As already suggested, it is unlikely that all the watercolours produced in the 1730s were intended for reproduction in the catalogue of the museum, especially as the drawing of the objects continued in the 1740s and 1750s, after the publication of the catalogue. It is more probable that the project had a multiple goal; just like topographical drawings and later photographs became indispensable to scientific research, these drawings of the *Kunstkamera* collection also had an important function in the daily work of the curators of the collections and the professors of the Academy of Sciences.

Ultimately the 1741-1745 catalogues of the library and the *Kunstkamera* remained unillustrated but Peter II's order had not been forgotten. In 1747, 66 'depictions of ancient and memorial curiosities of the *Kunstkamera*' were selected for engraving. They were engraved on twenty-six copper plates and printed by the master of the Engraving Chamber, Ivan Sokolov, and illuminated by apprentice Andrey Grekov.⁶⁶

The founding of a Drawing Chamber in 1738

After 1738 the project seems to have been interrupted. At least, no drawings dated 1739 to 1742 have been discovered so far. The reasons must have been as follows. Firstly, there was a practical reason: in the first half of the 1740s draughtsmen and engravers were engaged in making an album commemorating the coronation of Empress Elizabeth Petrovna, even working into the night. In addition a development of a more fundamental nature may have caused the interruption. In 1738 regular drawing classes were started at the Academy of Sciences. Bartolommeo Tarsia, the painter to the Court who had come to Russia in 1722, began teaching at the Academy of Sciences. He taught drawing to the pupils of all the workshops (three two-hour classes a week), his salary being 200 roubles a year.⁶⁷ In the same year, the first sitter was hired.⁶⁸ For that reason some scholars regard the year 1738 as the beginning of a Drawing Chamber at the Academy of Sciences.⁶⁹ Indeed, this was a significant event in the history of teaching drawing in Russia.

After the opening of the Drawing Chamber, the system of art education at the various workshops of the Academy of Sciences under-

64. SPBARAN, f. 3, op. 1, no. 151, 449; inv. 158, 86-87; *Materialy* 1885-1900, vol. 9, pp. 173, 220.
65. *Materialy* 1885-1900, vol. 9, pp. 90-91.

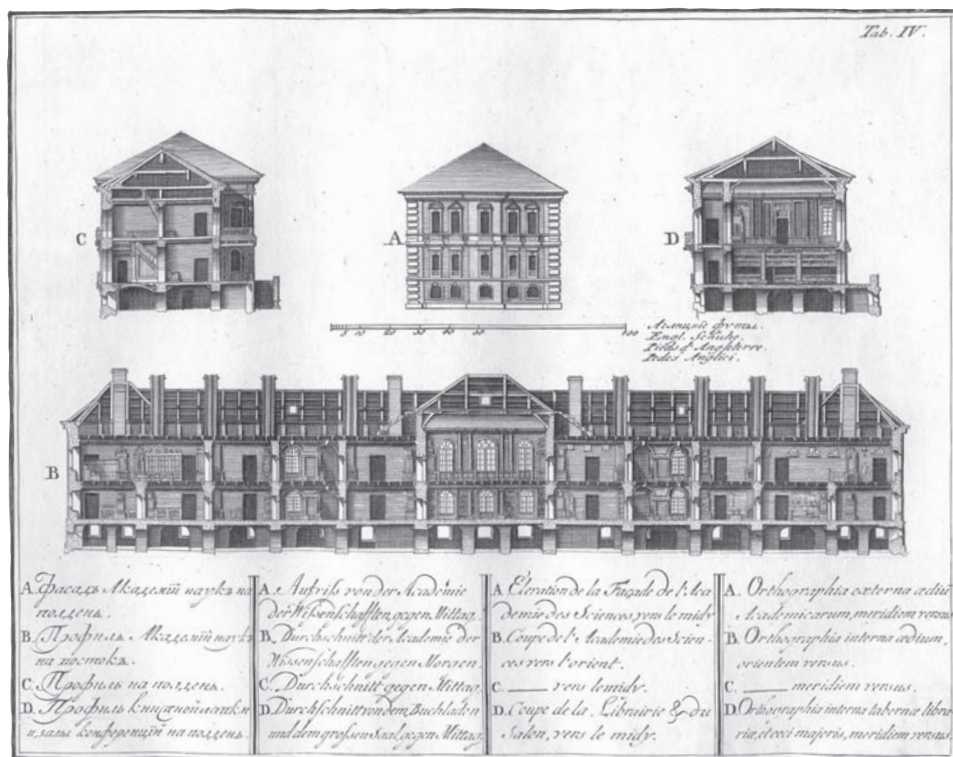
66. *Materialy* 1885-1900, vol. 8, p. 434; vol. 9, p. 351.

67. *Materialy* 1885-1900, vol. 4, p. 296.

68. *Materialy* 1885-1900, vol. 3, p. 842.

69. Pronina 1983, p. 32; Malinovsky 1990b, p. 9.

ill. 2. Ivan Sokolov, the premises of the Academy of Sciences (formerly the palace of tsarina Praskovya Feodorovna). The Engraving and Drawing Chambers occupied three rooms on the first floor of the right wing. *Palaty 1741, Tabula IV.*



went serious changes. Drawing methods were made compulsory at the initial stage, which were followed by specialization in the respective art workshops. The teaching methods used by successive masters of the Drawing Chamber relied on the achievements of the Western European schools of drawing. In 1741 the German painter Johann Elias Grimmel, graduate of the Vienna Academy of Arts became master and head of the Drawing Workshop. His place was taken in 1758 by the Italian theatre painter Francesco Gradizzi, who had come to Russia five years earlier. In 1766-1767 the Italian painter Francesco Gandini was the head of the workshop. As stated in their contracts, these masters were commissioned to teach drawing to those working in all the art workshops in addition to their other responsibilities.

Those trained at the Drawing Chamber were divided into three grades. Admission was open to boys of 11-12 years who were literate and showed an ability to draw during a two-month probationary period. Beginners were to copy illustrations from J.D. Preissler's book *Basic Rules or Concise Manual of the Art of Drawing* published in Russian by the Academy of Sciences in 1734. In addition they were to copy simple drawings and engravings. For teaching second graders,

more complicated multi-figure compositions and drawings of nature by well-known masters were used, as well as plaster casts. At a more advanced level, students were to draw both plaster casts and objects from nature, as well as creating original compositions of their own.⁷⁰ During the years at the Drawing Chamber, the pupils mastered the art of drawing in pencil and black chalk. Some of the future engravers and draughtsmen were taught to draw in Indian ink and watercolour. Only a few completed their training as draughtsmen and fewer still as painters. Owing to this new orientation in teaching drawing, it is possible that less attention was temporarily paid to the *Kunstkamera* objects.

During the 1740s and 1750s the Academy of Sciences spent a lot of time and effort on building up a collection of drawings and engravings to be used in teaching. French, Italian and English drawings and engravings of quality were being purchased at the time for the Drawing Chamber.⁷¹ A collection of plaster casts had also been formed. Teachers and students had access to statues and low-reliefs of Christian subjects and Classical Antiquity, some purchased in Russia in 1746 and 1754 and others brought from Holland in 1748.⁷² In 1749 another manual was published by the Academy of Sciences at the suggestion of Ivan Sokolov, master of the Drawing Workshop, entitled: *A Clear and Fundamental Presentation of Anatomy for Painters* by Carlo Cesi(o), who taught anatomy at the Academia di S. Luca in Rome (Carlo Cesio, *Cognizione de Muscoli del Corpo Umano per uso di Disegno*, Rome 1679).

The classes on drawing from life taught at the Drawing Chamber were not only intended for all advanced students and apprentices of the other workshops,⁷³ they were also open to the public. Every year the Academy of Sciences placed an advertisement about these classes in the *St Petersburg Chronicle*.⁷⁴ In the early 1740s, the Drawing Chamber even became the centre for drawing in the city, as it also trained employees of various governmental organizations, such as the Chancellery of Construction, the Chancellery of Artillery and Fortifications, the Admiralty, the Synod, the Mint Office, the Heraldry Chancellery, Guard regiments, etc. Moreover, it was the only institution admitting students who were not affiliated with any governmental organization. In practice, the arts division of the Academy of Sciences began to play the role of an Academy of Arts as early as the 1740s.

70. The original title of Johann Daniel Preissler's manual was: *Die durch Theorie erfundene Practic, Oder Gründlich-verfasste Regeln deren man sich als einer Anleitung zu berühmter Künstlerer Zeichen-Wercken bestens bedienen kan*, Nuremberg 1728-1731 (cf. Russian edition Preissler 1734 and 1750). The details of the curricula of each grade of the Drawing Workshop are reflected in the project of the Constitution of the Academy of Arts of the Academy of Sciences, drawn up in the 1750s, first published by D.A. Rovinsky. See Rovinsky 1855, p. 59.

71. Malinovsky 1990a, vol. 1, pp. 418-420.

72. *Materialy* 1885-1900, vol. 8, p. 471; vol. 9, pp. 313, 434-436; Pronina 1973, p. 81.

73. *Materialy* 1885-1900, vol. 5, pp. 127, 778; vol. 7, pp. 396-397; vol. 9, pp. 173, 220. In F. Gradizzi's contract signed in 1758, there was a special clause on classes on drawing from life at the Academy of Sciences, see SPBARAN, f. III, op. 7, no. 94, 12 (reverse).

74. Classes on drawing from life at the Academy of Sciences started in May 1742, see *Materialy* 1885-1900, vol. 5, pp. 127, 310; vol. 7, p. 389; vol. 8, pp. 108-109.

The drawings of the Second Kamchatka Expedition (1733-1743)

The second stage of making the drawings of the objects in the collection began after the return of the Second Kamchatka Expedition in St Petersburg in 1743, bringing together unique collections of objects of natural history, archaeology and anthropology, as well as drawings by the expedition artists, Johann Christian Berckhan, Johann Wilhelm Lürsenius and Johann Cornelius Decker.⁷⁵ During the expedition, the artists did drawings of newly discovered plants, animals and archaeological and anthropological finds. It should be pointed out that this category of drawings can only partly be considered to be part of the corpus central to this publication. They are often field sketches or preliminary studies for engravings, depicting the objects in a way that they did not appear in the *Kunstkamera*. As the boundaries between the corpus central to this publication and other drawings cannot always be clearly defined, brief attention will be paid here to these drawing activities.

The draughtsmen worked in close co-operation with the professors of the Academy of Sciences. In St Petersburg, Decker was drawing 'herbs and other things brought from Siberia', while Lürsenius was finishing '[drawings of] herbs and birds done in Siberia', in addition to the drawings he was doing of plants growing in city gardens.⁷⁶ The historian Gerhard Friedrich Müller, a member of the expedition, commissioned Decker in 1744 to do drawings of traditional clothes of Siberian peoples and antiquities, as well as copies of town plans made in Siberia. Due to financial difficulties, however, the number of workers involved had to be reduced and the contract with Decker was cancelled.⁷⁷

The artist's career was problematic, probably due to his fairly narrow specialization. Six years later, he again applied for a position at the Academy of Sciences. The museum's standards were high and the *Kunstkamera* curator, assistant-librarian Johann Caspar Taubert, stipulated that Decker should take a test. He was 'to make drawings of one item in each group of objects in the natural-history collection'.⁷⁸ Between July and September 1750 he managed to do drawings of 'only three items, namely, one bug and two sea spiders'. Owing to his poor eyesight, which had deteriorated as a result of hard work on the expedition, as well as his general tardiness, Decker was not given the position he was seeking. Taubert, however, did not exclude him from drawing 'bigger objects'.⁷⁹ Whether he worked for the museum or not is unknown, for no signed watercolours by him have survived.

In 1745, Johann Wilhelm Lürsenius, apprentice Andrey Grekov,

75. *Materialy* 1885-1900, vol. 5, p. 604; vol. 8, pp. 194-212.

76. SPBARAN, f. 3, op. 7, no. 94, 41. Artists were to draw all of the materials collected during expeditions.

77. SPBARAN, f. 3, op. 7, no. 94, 41, 43.

78. *Materialy* 1885-1900, vol. 10, pp. 464-465.

79. *Materialy* 1885-1900, vol. 10, pp. 488, 579.

painting master Johann Christian Grube (who had been involved in the *Coronation Book* of Elizabeth Petrovna), and four of the most talented pupils of the Drawing Chamber, N. Lyubetsky, I. Rukomoikin, N. Plottsov and E. Vinogradov were assigned to make drawings of plants, which Professor Johann Georg Gmelin had collected in Siberia. It was the first time that descriptions had been written (by Gmelin) and drawings done by artists of the Academy of Sciences of many of these plants.⁸⁰ The draughtsmen worked at the professor's home from 6 am to 12 noon and from 2 to 8 pm every day, the same working hours as in the workshops of the Academy of Sciences.⁸¹ As a result, 297 drawings of Siberian herbs were published as illustrations in Gmelin's four-volume monograph *Flora Sibirica sive historia plantarum Sibiriae* (1747-1769).⁸²

The Academy of Sciences valued the work of Lürsenius highly. In 1746, he was commissioned to copy 48 drawings in the *Kunstkamera* by Maria Sibylla Merian for the Empress. The instruction was 'not to make or give out copies other than those intended for her Imperial Majesty'.⁸³ As the best of the Academy's artists, he was sent in 1746 to work at the wallpaper factory 'to draw designs and samples'. It was not until 1749 that he was able to return to the Academy of Sciences and was appointed 'drawing master of herbs and various objects in the natural history collection' of the *Kunstkamera*, with a salary of 200 roubles a year.⁸⁴ At the time, he was working for Professor Müller making 'drawings relating to the Siberian descriptions'.⁸⁵ In 1751 Taubert asked him to copy sheets from the Ruysch herbarium preserved in the *Kunstkamera*. (Peter the Great had purchased the herbarium together with Frederik Ruysch's anatomical collection.) In 1754 Lürsenius became head of the team of artists working for the museum; he also 'was regularly asked to do other work both for the Academy of Sciences and for the Heraldry Department'.⁸⁶

Johann Christian Berckhan was also simultaneously involved in dealing with the expedition material and making drawings of the *Kunstkamera* objects. Berckhan had returned to St Petersburg in 1746, later than his colleagues on the expedition. The following year, he started working on the museum collections.⁸⁷ At first, he was depicting 'clothes of Asian peoples', putting them on a metal mannequin used for this purpose in the Drawing Chamber.⁸⁸ In 1748 he was working on the zoological collections of the *Kunstkamera*,⁸⁹ where he remained active until his death in 1751. A special committee then discovered his last work at his home, namely 'several sheets with drawings, in Indian ink, of birds and one small animal and another one just started'.⁹⁰

80. *Materialy* 1885-1900, vol. 7, p. 372.

81. *Materialy* 1885-1900, vol. 7, pp. 488-489.

82. J.G. Gmelin, *Flora Sibirica Sive historia plantarum Sibiriae*, vols. 1-4, St Petersburg 1747-1769.

83. *Materialy* 1885-1900, vol. 7, p. 715; SPBARAN, f. 3, op. 1, no. 99, 143.

84. *Materialy* 1885-1900, vol. 9, pp. 627, 710.

85. *Materialy* 1885-1900, vol. 10, p. 246.

86. SPBARAN, f. 3, op. 1, no. 149, 393 (reverse); op. 8, no. 12, 2.

87. SPBARAN, f. 3, op. 1, no. 153, 156.

88. *Materialy* 1885-1900, vol. 8, p. 441.

89. SPBARAN, f. IX, op. 4, nos. 643, 644, 647, 648, 652, 663-669, *et passim*.

90. SPBARAN f. 3, op. 1, no. 153, 150.

The Constitution of the Academy of Sciences and Arts and the founding of a separate Academy for Painting, Sculpture and Architecture in 1757

In 1747 Empress Elizabeth Petrovna signed the *Regulation of the Academy of Sciences*. From then on it was to be called the Academy of Sciences and Arts. The arts, together with the printing house and bookshop, are mentioned as a separate division of the Academy of Sciences in the text of the *Regulation*. For the first time, the educational goals of the arts division were defined in the constitution of the Academy of Sciences. According to the *Regulation*, ‘pupils from all over Russia were to be admitted to the Academy of Sciences to study all the arts, free of charge, sponsored by the institutions to which they belong.’ The total number of apprentices on the staff of the Academy of Sciences could be increased to 50.⁹¹ Apart from that the Empress’ decree of 4 August 1747 established a special allowance to the value of 28,386 roubles for the Academy of Arts and the ‘expansion of the library and *Kunstkamera*’. This meant that the annual budget of the Academy of Sciences was practically doubled.⁹² According to the same decree, ‘Russian subjects both of the nobility and of any civic state other than serfs’ could study ‘civilian sciences and arts’ at the Academy of Sciences and Arts, free of charge, ‘except for their own living costs’.⁹³

Official recognition of the Academy of Arts made it possible to increase the staff of the Academy. For example, Giovanni Valeriani (c. 1708-1762) was employed from 1748 to teach perspective and painting.⁹⁴ Johann Friedrich Dunker (1718-1795) became head of the Carving Chamber (Workshop) in 1749 and started teaching sculpture and modelling.⁹⁵ The architect Johann Jacob Schumacher (1701-1767) was teaching architecture at the university,⁹⁶ which like the grammar school fell under the Academy of Sciences. Grimmel remained head of the Drawing Chamber and the principal drawing teacher. The staff of the Engraving Chamber, headed by Ivan Sokolov from 1746, was still the largest.

In the same year that the *Regulation of the Academy of Sciences and Arts* was adopted (1747), the positions of ‘painter of animals and flowers’ and museum assistant were added to the Academy staff. To fill these positions several pupils of the Drawing Chamber (Maxim Rykov, Nikita Bolotov and Pyotr Nazarov) underwent special training to work at the *Kunstkamera*.⁹⁷ In 1751, as well as Nikita Bolotov, we encounter the students Ivan Skornyakov, Efim Melnikov and Ivan Soplin, who later would be ‘assigned to work with the natural history

91. Ostrovityaninov 1958-1964, vol. 1, pp. 448, 452.

92. *Ibid.*

93. *Ibid.*

94. *Materialy* 1885-1900, vol. 9, p. 87.

95. *Materialy* 1885-1900, vol. 10, p. 176.

96. *Materialy* 1885-1900, vol. 10, pp. 316-317, 319, 323, 367.

97. SPBARAN, f. 3, op. 7, no. 93, 10 (reverse).

collections of the *Kunstkamera*'.⁹⁸ Three years later in 1754, the museum staff did indeed include 'the apprentice in the drawing of the natural history collection' Rykov, and the pupil Bolotov, as well as the master Lürsenius. Bolotov, in addition to learning drawing, was being trained as a curator with the aim of becoming a museum assistant later.⁹⁹ During this period the selection of collections to be drawn must have been made by Johann Caspar Taubert, the librarian and councillor of the *Kunstkamera* Office.¹⁰⁰ He regularly applied to the Academy Chancellery for materials required by the artists.¹⁰¹ For example, in June 1746 he asked for Indian ink and brushes for drawing 'old Russian coins and medals'.¹⁰² Rykov and Bolotov were working on drawings of items in the zoological collection in the 1740s and 1750s and in 1757, Rykov was drawing medals.¹⁰³

It is also significant that the administrative structure changed. In 1748, the Assembly of the Academy of Arts was created as the Academy's administrative body, headed by Professor Jacob Stählin, with Grimmel, Valeriani, the architect Johann Jacob Schumacher and (later on) Dunker as its members.¹⁰⁴ In May 1757 Stählin was appointed director of the Academy of Arts¹⁰⁵ but the general administration of the arts division remained the prerogative of the Chancellery of the Academy of Sciences.

This was only a temporary measure. In the late 1750s an attempt was made to work out a definite *Constitution of the Academy of Arts* that formulated its goals. The most important of these was developing and propagating all the arts based on the art of drawing, namely: painting, sculpture, engraving, medal making and architecture, as well as teaching these to young people, so that 'the noble arts would become more widespread in the Empire'.¹⁰⁶ The *Constitution* also defined the rules for admitting students to the Drawing Chamber, teaching methods and the responsibilities of masters and their apprentices. It was in fact a written ratification of the 20 years experience of the workshop.

However, the *Constitution* was never officially approved and events took a complete change of course. In 1757, independently of the Academy of Sciences and its art division, the French-oriented cultural adviser of Empress Elizabeth, Ivan Shuvalov, established an Academy 'of the three most important arts', i.e. painting, sculpture and architecture. Thanks to him, it soon found itself under the patronage of the Court and the Empress herself. The new Academy was based on the principles similar to those of the French Academy of painting and sculpture. Shuvalov was able to arrange adequate financing and to invite some outstanding teachers like the painter

98. SPBARAN, f. 3, op. 1, no. 150, 141.

99. SPBARAN, f. 3, op. 8, no. 12, 2 (obverse and reverse).

100. *Materialy* 1885-1900, vol. 2, pp. 142, 143; Ostrovityaninov 1958-1964, vol. 1, pp. 160-161.

101. SPBARAN, f. 3, op. 1, no. 143, 363; op. 158, 71.

102. SPBARAN, f. 3, op. 1, no. 102, 176.

103. For zoological drawings by Rykov, see SPBARAN, f. IX, op. 4, nos. 584, 649-651, 655-657 *et passim*; drawings by N. Bolotov, nos. 662, 672. For data on the drawings of medals see SPBARAN, f. 3, op. 1, no. 222, 395.

104. Rovinsky 1855, pp. 58-61.

105. Malinovsky 1990b, p. 11.

106. Quoted from Rovinsky 1855, p. 58.

107. Malinovsky 1990a, vol. 1, p. 137; Alekseeva et al. 1985, pp. 26-27

108. For details see Malinovsky 1987, pp. 260-261.
 109. For the artists working in the museum in the third quarter of the eighteenth century, see Stetskevich 1997, pp. 263-264.

L.G. Le Lorrain, the sculptor N.F. Gillet and the engraver Georg Friedrich Schmidt. The latter was on the staff of the Academy of Sciences at the same time. Shortly afterwards, some of the brightest pupils of the Academy of Sciences were transferred to the new Academy of Fine Arts.¹⁰⁷

It was administrative changes in the Academy of Sciences that ultimately led to the closing of its Academy of Arts. In October 1766, the Academy Chancellery was abolished and Count Vladimir Orlov was appointed as director of the Academy of Sciences. His attitude to the workshops was strictly negative and in 1766-1768, the majority of draughtsmen, painters and engravers were dismissed. Only those making engravings for anatomical and botanical publications or participating in expeditions in the last quarter of the eighteenth century remained on the staff of the Academy of Sciences.¹⁰⁸ The well-established ties between the museum and artists practically ceased to exist after 1766.¹⁰⁹

Conclusion

During the second quarter of the eighteenth century, the Arts Chambers (Workshops of the Academy of Sciences) were closely connected with the *Kunstkamera*. For decades, artists on the staff of the museum and people employed by the Chambers were making drawings of the museum exhibits. Their signed drawings still give us an impression of their work today. Regretfully, it is only archival records that may shed light on the true role of some of those who did not sign their work. It is possible that subsequent research will yield the names of the authors of some watercolours and that the drawings that have been assumed to have been lost until now will resurface.

The reasons for making the drawings were diverse. Some were to be used as illustrations for the *Kunstkamera* catalogue; others were to illustrate various scientific publications. Besides, drawings were necessary for the daily work of the museum curators and the professors of the Academy of Sciences. Thanks to the watercolours that have survived to the present-day, we have an idea of what the collections of the *Kunstkamera* were like.

To create so many drawings was only possible thanks to the workshops of the Academy of Sciences. The arts division was able to satisfy all the needs of the *Kunstkamera* with respect to the arrangement and restoration of the collections, the creation of interiors and even the rebuilding of the museum after the fire of 5 December 1747. This meant that the *Kunstkamera* activities reached their peak in the mid-

dle of the eighteenth century. The workshops, set up to meet the various practical needs of the Academy of Sciences, had in fact become the centre for training specialists in various arts and in this way prepared the way for an independent Academy of Arts, which was founded in 1757.

THE PAPER MUSEUM: ITS AIMS AND USES

Natalya P. Kopaneva

Whereas in the first chapter of this book the functions of the ‘paper museum’ were discussed in the context of the conventions in this field elsewhere in Europe at that time, this article will endeavour to do the same by looking at the situation in Russia itself. What kind of information do the sources in Russia offer on the aims and uses of the drawings? One question in particular comes to the fore: to what extent can they be regarded as preliminary drawings for prints? As already discussed, their importance cannot be considered independently of the production of illustrated educational and scientific publications that was emerging. When and under what conditions did the need for such illustrative material originate in Russia?

Educational illustrative material for the children of the Emperor

Since the second quarter of the seventeenth century, Western-European drawings and prints were available in the highest circles in Russia that contributed to preparing the way for producing the corpus that is the subject of this publication. The educational effect of such illustrative material was quickly recognized, particularly for young people. *Potesnye listy* (lit. ‘amusement leaves’), either engravings and watercolours purchased in Western Europe, or ‘amusement albums’ specially created by painters to the Tsar were used from the seventeenth century for teaching the Tsar’s children. Peter the Great’s father, Alexey Mikhailovich, and his father’s sisters had Russian and German ‘drawn sheets’ for this purpose as small children.¹ In his *Everyday life of the Russian Tsars*, I.E. Zabelin mentions ‘ten outstanding sheets [...] with depictions of animals, birds, and grasses’ were bought at the vegetable market for Alexey Mikhailovich’s little daughter.² A.P. Bogdanov, a historian of the education of the Tsar’s children in the seventeenth century, called the *Great Amusement Book* produced in 1664 for teaching Alexey Mikhailovich’s children ‘a real painted encyclopædia’.³ The depictions included military subjects (drummers, trumpeters, infantrymen, cavalry and artillery), townscapes, birds and animals (a whale, a walrus, a polar bear, lions, crocodiles and monkeys), seascapes and sea battles, a large ethnographic series of the daily life of various peoples, daily life in Russia, and children and their games and other entertainments. In 1677 engravings from copper plates began to be printed at the *Verkhny* (‘High’) Printing Office that Fedor Alexeevich, Peter the Great’s brother, organized in the Palace in Moscow. Officially it existed until 1683 but its equipment was still in use in the late seventeenth century.⁴ Nikita Zotov, the teacher of the young Peter the Great, used ‘teaching pictures’, in addition to

1. Bogdanov 2003, pp. 249–250.

2. Zabelin 1915, pp. 101, 135.

3. Bogdanov 2003, p. 233.

4. *Ibid.*, pp. 235, 251–252.

5. Kniaz'kov 1991, pp. 14-15.

6. *Ibid.*, p. 15.

poteshnye ('amusement') ones. These were historical albums from the Tsar's library, namely, 'prints and albums with depictions of towns from all over Russia, as well as books showing many universally renowned cities and all Roman churches, palaces and other sites, with their dimensions, both width and length'.⁵ For teaching Peter the Great, the artists of the *Oruzheynaya* ('Armour') Chamber coloured in prints of 'cities, chambers, buildings, military engagements, great ships and, generally, historical characters with explanations'.⁶ These prepared the Tsar for his travels to Western Europe.

Peter's introduction to collections and illustrated catalogues

While travelling, Peter the Great saw a number of well-known collections and illustrated catalogues. With the experience of his own youth, he was convinced that visual aids could be used in teaching in addition to books. Besides, making engravings of scenes from ancient and contemporary history and publishing catalogues of rarities had a considerable political significance. It was appropriate for a European monarch to have not only a curiosities chamber but also a description of it. In the seventeenth and eighteenth centuries, collection catalogues became a characteristic of supreme power. But Peter put his own specific emphasis on this. Compare what the librarian to the Tsar, Johann Daniel Schumacher, remarked in this connection about the collections of the Elector of Brandenburg: 'The royal coin collection and the chamber of antiquities [in Berlin] ... deserve better treatment [...]. It is regretful that, instead of increasing, these decrease every day, because His Royal Majesty is interested in sustaining the military, rather than supporting the sciences.'⁷ In contrast to this, one of the explicit goals of Russian diplomacy was 'to create an image of Peter the Great, for European public opinion, as the enlightener of the nation whose glory equally depended on the development of learning as on achievements on the battlefield.'⁸ In other words, a 'paper museum' could make an enormous contribution to Russian prestige in Western Europe.

As attested by the numerous documents pertaining to Peter the Great's life, it was indeed the practical applicability of knowledge, including its use in everyday life, rather than prestige that was first and foremost the focus of the Tsar's interests. Hence, his efforts to introduce Western European culture and learning in Russia. Thanks to him, scientific research had even started before the Academy of Sciences was founded in St Petersburg in 1724; the *Kunstkamera* was the first research centre. Botanical, zoological, archæological,

7. See: 'Otchet, podnesennyi Petru Velikomu ot bibliotekar'a Schumachera o zagranichnom puteshestvii v 1721-22 godakh [Report presented to Peter the Great by the librarian Schumacher, on [his] foreign travel in 1721-22]', in: St Petersburg 1862, vol. 1, pp. 545-546.

8. *Memoires pour l'histoire des sciences & des beaux arts (...)*, vol. 37, Paris/Trévoux. 352-353 (quoted from Kopanev 1988, p. 18).

ethnographical and historical finds were delivered to St Petersburg from all over Russia. Drawings of these items made up the core of the ‘paper museum’.

Scientific drawings in Russia before the ‘paper museum’

Before work on the corpus that we now know as the ‘paper museum’ began, illustrative material that was Western-European oriented was available in Russia, as we have already seen. However, *scientific* drawings and prints were scarcely produced at all. A turning point was the expedition to Siberia in 1720, undertaken by Daniel Gottfried Messerschmidt at the request of Peter the Great. Messerschmidt was a Danzig medical doctor in Russian service. The following indicates that the material from this expedition was immediately used to improve the scientific reputation of Russia abroad.

By the order of Peter the Great, Johann Daniel Schumacher, the curator and librarian of the *Kunstkamera*, was visiting museums and libraries in France, Germany, Holland and England from February 1721 to the end of 1722.⁹ In turn, Western Europe became acquainted with the achievements of St Petersburg scholars. On 4 August 1721, Schumacher arrived in Paris. The next day, he gave a talk at the session of the Académie des Sciences, which Peter the Great had been an honorary member of since 1718. Schumacher showed the audience a map of the Caspian Sea and told them about the description of Siberian birds by the above-mentioned Messerschmidt. Although the talk was only about the first part of Messerschmidt’s *Ornithology*, which was ‘a sample essay’, it impressed the French Academicians who suggested that ‘the other aspects of the natural history of all the provinces of Russia be described in detail as well [...]’.¹⁰ Messerschmidt was very particular not only about describing the objects he collected, but also about drawing them. His reports, now preserved in the Archives of the Russian Academy of Sciences (St Petersburg Branch), contain pencil and watercolour drawings of, for example, birds in trees or a stylized landscape, or otherwise stuffed birds hanging on strings. (ill. 1, 2) The drawings are strictly functional, merely illustrating the descriptions of the objects depicted. Schumacher probably not only brought the manuscript that Messerschmidt had sent from Siberia but also the drawings to Paris, as the French Academicians asked for the descriptions of the ‘other provinces of Russia’ to be illustrated ‘in the same way’,¹¹ i.e. similar to those shown by Schumacher.

The visit of the Tsar’s librarian to Paris was reported in the French newspapers. According to the *Gazette de France*,¹² Schumacher also

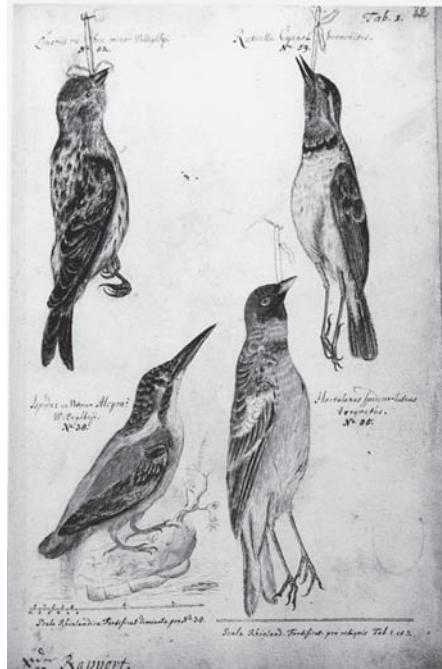
9. *Ibid.*, pp. 533–558.

10. *Ibid.*, pp. 535–536.

11. *Ibid.*, p. 536.

12. *Gazette de France*, Paris, October 1721.

Ill. 1. and 2. Unknown artist, 1720s, Depictions of birds from Daniel Messerschmidt's collection. Watercolour, pencil. Archives of the Russian Academy of Sciences (St Petersburg branch), f. 98, op. 1, no. 20, leaf 82, tables 1 and 2.



brought with him depictions of archæological finds, some of which were also from Messerschmidt's expedition. In the issue of 18 October 1721, one can read about 'many bronze statues discovered in graves in Kalmyk forests. Among those which the Tsar ordered to be placed in his study,' continues the article, 'one can see a Roman lamp in the form of a mounted figure of a Roman general, with a laurel wreath on his head, two mounted figures wearing 12th or 13th-century Western European armour, and many Indian idols, including a goddess worshipped in China and Tibet [...]. Peoples of China, Siam and India believe that she was the mother of one of their prophets who lived six centuries before Christ [...]. In India, he is called Buddha.'¹³ A fuller version of Schumacher's talk was later published by Guillaume Delisle, the Royal geographer, as a supplement to his publication of the *Voyage de Corneille de Bruyn par la Moscovie en Perse et aux indes Orientales*.¹⁴ In the report, Schumacher talked about axes, knives, various vases, urns, lamps, ear rings, rings, bracelets, bronze and silver depictions of human beings and animals, which one can picture while looking at the 'drawings of the originals [...] now preserved in his Royal majesty's study'.¹⁵ He added: '[...] I am not going to publish the engravings here, but I should like to inform the public that these can be found at the end of the last volume of Montfaucon's *L'antiquité expliquée*'.¹⁶ Indeed, the engravings showing the objects in question

13. *Ibid.*

14. Cornelis de Bruyn, *Voyage de Corneille de Bruyn par la Moscovie, en Perse, et aux indes Orientales*, vol. III, Rouen 1725, pp. 473-475.

15. *Ibid.*, p. 476.

16. *Ibid.*

were published in 1724 in *L'antiquité expliquée et représentée en figures*¹⁷ by the Benedictine Bernard de Montfaucon (1655-1741). He was a bibliographer and palæographer whom Schumacher visited while in Paris and corresponded with after he had returned to St Petersburg, discussing the 'organization of the library and the *Kunstkamera*'.¹⁸ When preparing his publication, Montfaucon had visited all the important European collections of antiquities and commissioned engravings of the objects he had described. The fifth volume of his work contained the first publication of the drawings of the Russian archæological and ethnographic collections, with Schumacher's descriptions in French and Latin.¹⁹ According to this description, the book showed nine metal figurines found 'in the land of Kalmyks, between the Caspian and Siberia'. But Johann Philipp Strahlenberg, who had accompanied Messerschmidt on his Siberian expedition for some time, pointed out that the finds of the collection were from the Irtysh rather than the Caspian area, some of the objects having been taken from heathen temples, some discovered in graves and others snatched away from the Ostyaks.²⁰ The collection includes objects from Kalmyk Buddhist temples, four Buddhist figures from a later period, a Classical-Antiquity lamp, one typically Chud cast bird, characteristic of the Urals Iron Age, and one bronze fifteenth-century Western European mounted knight (Lower Volga or Kazakhstan). Leaving aside the problem of the attribution of the objects in question, it should be stressed that the French newspaper was the first to mention the archæological collections of the *Kunstkamera*, while Montfaucon's work was the first publication about the objects in it. The 'paper museum' includes drawings of the objects described by Montfaucon in his publication. A comparison of the engravings in his book, the drawings in Messerschmidt's report and the depictions in our 'paper museum', however, suggests that the engravings were made after the drawings described in the report, which are similar in technique and craftsmanship. (ill. 3-9)

*Peter the Great decides to commission drawings of the
Kunstkamera objects*

As indicated above, the early 1720s were of crucial importance to Russian scholarship. The first expedition took place, with immediate results in the form of tangible objects and written and illustrative documentation. Activities then gained rapid momentum. The earliest evidence that all the objects preserved in St Petersburg *Kunstkamera* were to be depicted can be found in Dorothea Maria Gsell's report of

17. B. de Montfaucon, *L'antiquité expliquée et représentée en figures*, 5 vols., Paris 1719 (five volumes in 10 parts; 2nd ed. 1722). In 1724 the five-volume *Supplément au livre de l'antiquité expliquée et représentée en figures* came out (Paris 1724; 2nd ed. 1757).

18. Writing in his report about the Royal Library in Paris, Schumacher stressed that in the library catalogue 'the majority of the publications were described by Montfaucon'. He is also mentioned in Schumacher's description of Leiden Library. See Pekarsky 1862, vol. 1 p. 556.

19. Montfaucon 1724, vol. 5, pp. 152-154.

20. Radlov 1888-1902, part 1-2 (1891), pp. 25, 28. Nowadays, the Caspian objects depicted in four of the nine plates by Montfaucon are believed to 'belong to different periods, making up a collection accumulated over several years and most probably consisting of finds from different localities, rather than an archæological complex'. Formozov 1968.

ill. 3. Unknown artist, 1730s, Washstand (aquamanium), shaped like a bird with a hinged beak (Western Europe?, 14th c.). Watercolour, pencil. Archives of the Russian Academy of Sciences (St Petersburg branch), f. IX, op. 4, no. 176.

(*Paper Museum* cat. no. 674)

ill. 4. Unknown artist, Washstand (aquamanium), shaped like a bird with a hinged beak (Western Europe?, 14th c.). Engraving from Bernard de Montfaucon, *Supplement au livre de l'antiquité expliquée et représentée en figures*, vol. v, Paris 1724.

ill. 5. Franz Andreas Bernz, 1730s, Bronze lamp shaped like a horseman (Siberia, 4th c. A.D.). Watercolour, pencil. Archives of the Russian Academy of Sciences (St Petersburg branch), f. IX, op. 4, no. 250. (*Paper Museum* cat. no. 676)

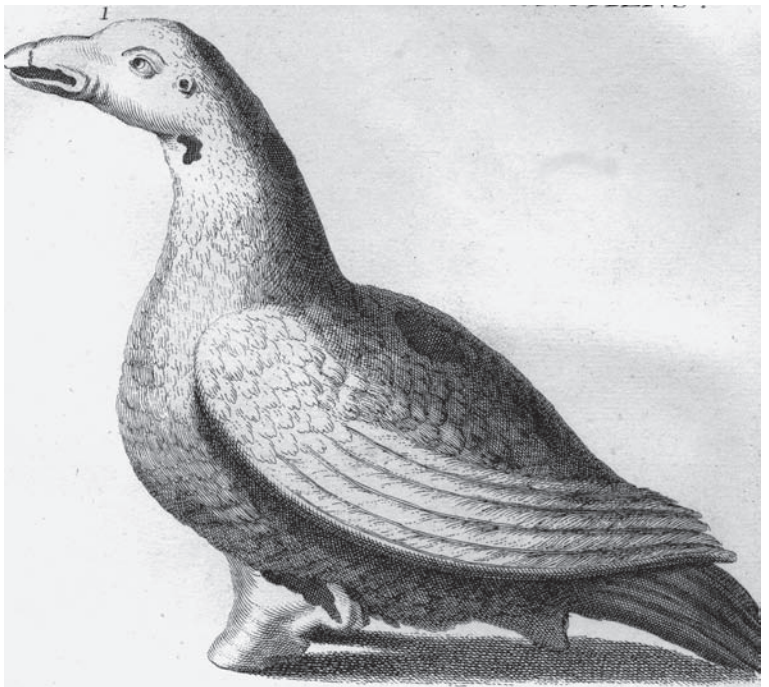
ill. 8. Grigory Kachalov, 1730s, Statuette of a horseman wearing armour (Western Europe?, 14th c.). Watercolour, pen and brush. Archives of the Russian Academy of Sciences (St Petersburg branch), f. IX, op. 4, no. 212. (*Paper Museum* cat. no. 671)

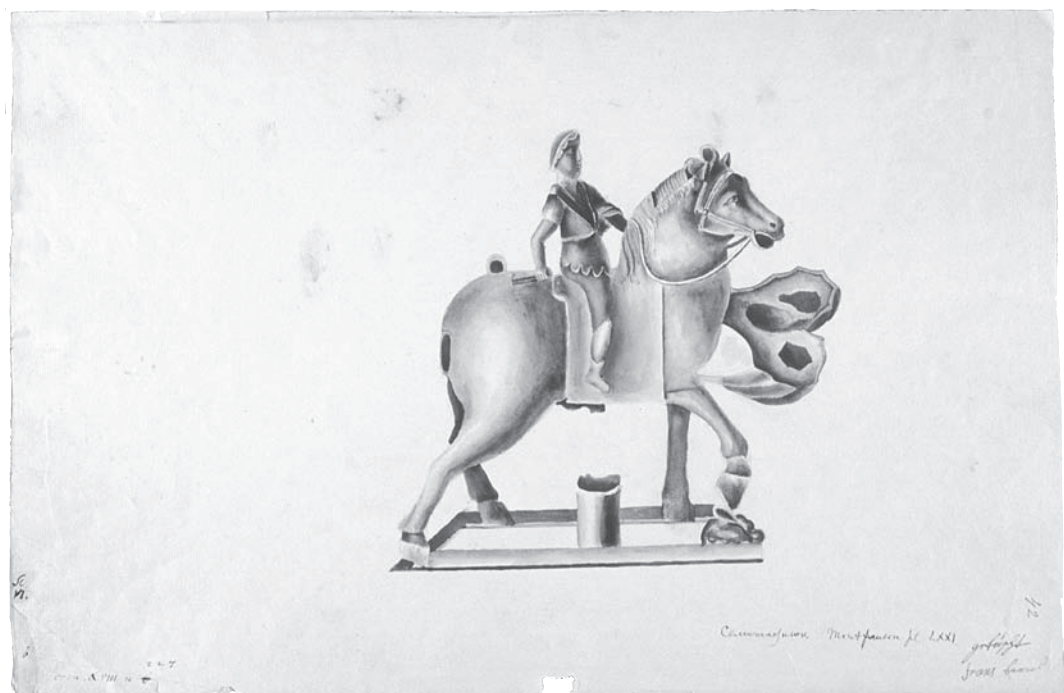
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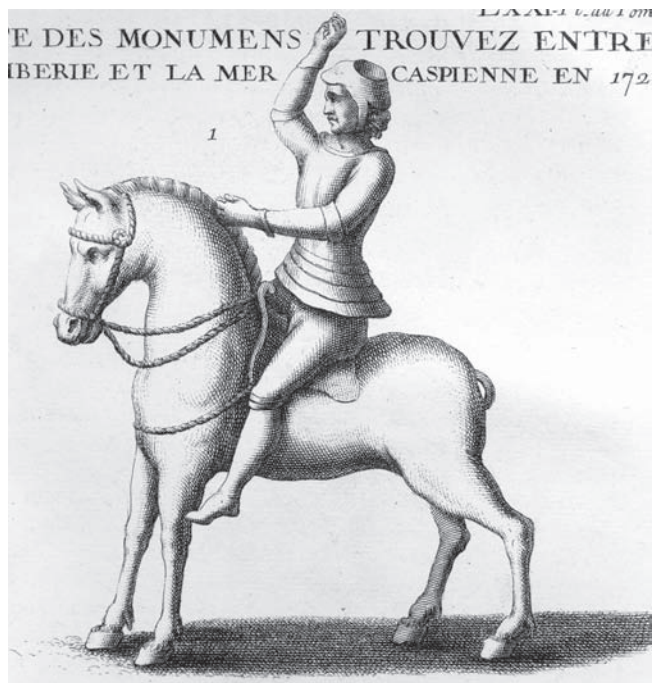
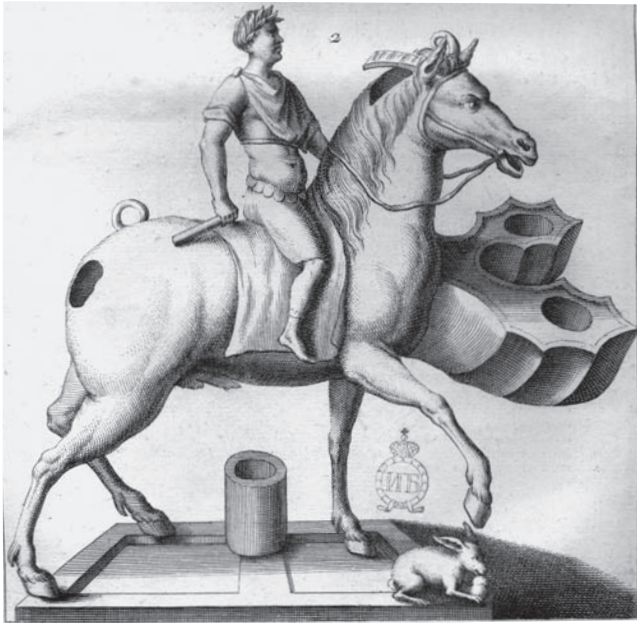
ill. 6. Unknown artist, Bronze lamp shaped like a horseman (Siberia, 4th c. A.D.). Engraving from Bernard de Montfaucon, *Supplement au livre de l'antiquité expliquée et représentée en figures*, vol. v, Paris 1724.

ill. 7. Unknown artist, Statuette of a horseman wearing armour (Western Europe?, 14th c.). Engraving from Bernard de Montfaucon, *Supplement au livre de l'antiquité expliquée et représentée en figures*, vol. v, Paris 1724.

ill. 9. Unknown artist, Horseman. Watercolour, pencil. Drawing from Daniel Gottlieb Messerschmidt's collection. Archives of the Russian Academy of Sciences (St Petersburg branch), f. 98, op. 1, no. 20, leaf 50







December 1723, cf. '[...] His Imperial Majesty has most graciously ordered, through the Court Physician, [...] Lavrenty Lavrentyevich Bluementrost, that I become attached to the *Kunstkamera* depicting [the objects of] the said *Kunstkamera* in watercolours, arranged according to the classes they belong to.'²¹ This indicates that it was Peter the Great's idea to have the *Kunstkamera* objects drawn, that the drawings were commissioned from the daughter of the renowned Maria Sibylla Merian, Dorothea Maria Gsell, that they were to be on parchment and grouped in classes. On 4 March 1724, Johann Daniel Schumacher requested that the Admiralty College undertake the production of parchment at its parchment mills 'for depicting curiosities'.²² On 17 March, he received twenty-two calf hides for producing this expensive material.²³ Regretfully, only four parchment drawings have been preserved to this day (see below); all the other known drawings of the 'paper museum' are on Dutch paper.

The need for illustrations for the publications of the Academy of Sciences

It is only natural that after the establishment of the St Petersburg Academy of Sciences in 1724, the drawings published in scientific works were to become as important in the academician's research as the items depicted. The publication of the researchers' work was regarded as a primary aim of the Academy. The proposals for establishing the Academy included a painter and an engraver, because 'the editions must contain drawings and engravings'.²⁴ For this purpose, a printing house was established, as well as two workshops, one for drawing and one for engraving. As already indicated in the correspondence of the Dutch publishing firm Jansson-Waesberg and Schumacher,²⁵ the latter had a plan to set up a printing house and a publishing and bookselling firm at the Academy. The plan materialized later. In 1725, Schumacher ordered printing equipment, type and founts for mathematical and chemical formulæ from Holland. Illustrations for the first volume of the Academy transactions, *Commentarii Academiae Scientiarum Imperialis Petropolitanae*, were commissioned from the well-known French engraver Bernard Picard who lived in Amsterdam.²⁶ On 30 August 1726, Schumacher sent Picard an anatomical drawing to be engraved for an article in *Commentarii*. But the publication of the volume was deferred, owing to political changes resulting from the death of Catherine I a year later. After the political situation had temporarily stabilized, the work was continued. In 1727, a contract was signed with the German-Dutch engraver

21. *Materialy* 1885-1900, vol. 1, p. 12.

22. *Ibid.*, p. 34.

23. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f. III, op. 112, nos. 84-85.

24. *Materialy* 1885-1900, vol. 1, p. 19.

25. Preserved in the Archives of the Russian Academy of Sciences in St Petersburg, see Kopanev 1991 (22 letters in translation).

26. Kopanev and Kopaneva 2003.

Ottomar Elliger. Moreover, the German engraver Christian Albrecht Wortmann came to St Petersburg and Alexey Fedorovich Zubov was invited to work at the Academy on a part-time basis. (He moved back to Moscow in 1729.) Schumacher therefore asked Picard to stop working on the engraving of the anatomical drawing and return the drawing to St Petersburg. The drawing, after being sent all over the place, was published in Vol. 1 of the *Commentarii*, illustrating an article on anatomizing an elephant by Professor Johann Georg Duvernois, engraved by Christian Wortmann. This is a clear example of the role drawings played from the very beginning at the Academy of Sciences. The drawing in question is preserved in the Duvernois collection of the Academy of Sciences and for this reason this has not been included in our catalogue, although the object it depicts was in the collection of the *Kunstkamera*. This is a clear example of the role drawings played from the very beginning at the Academy of Sciences.

Order to produce an illustrated catalogue of the Kunstkamera

In November 1727, two years after the death of Peter the Great and shortly before the collections were brought together in one place in the new building on the Neva, an order was given that ‘a catalogue of the *Kunstkamera* in the Russian dialect (sic!) be published and the most curious things be engraved’.²⁷ What was the aim of having the curious things’ engraved during that unstable period of the Court’s hardships? The Academy printing house had only been recently established and did not have the necessary equipment for publishing deluxe catalogues. It is not impossible that a number of the aquarelles in our ‘paper museum’ originated from this order. Seen in this light, our corpus could have a connection with the seventeenth-century tradition of educational illustrative material discussed at the beginning of this article, as the catalogue of prints of the most important objects in the *Kunstkamera* was probably connected with the education of the young Peter II. In 1727, Heinrich Ostermann became his tutor and tried to encourage an interest in learning in his imperial pupil. The same year he commissioned the Academy to make textbooks for the twelve-year-old Emperor. A textbook of mathematics and astronomy in three volumes was published in Russian and French. Volumes 1 and 3 and volume 2 were prepared by the mathematician Jacob Hermann²⁸ and the astronomer Joseph-Nicolas Delisle respectively. Gottlieb Siegfried Bayer, like the member of the St Petersburg Academy mentioned above, published a textbook of history.²⁹ The philosopher and physicist Georg

27. *Materialy* 1885-1900, vol. 1, p. 295.

28. J. Hermann and J.N. Delisle, *Abrégé des Mathématiques pour l’usage de Sa Majesté Impériale de toutes les Russies* (...), vols. 1-3, St Petersburg 1728.

29. G.S. Bayer, *Auszug der älteren Staats-Geschichte, zum Gebrauch Ihro Kayserl. Majestät Petri des II* (...), St Petersburg 1728.

Bernhard Bülfinger, ‘on the commission of his excellency [...] Baron von Ostermann’, made a manual for teaching Peter II, published in German and Russian. (The Russian version was only published after his early death.)³⁰ The latter edition is of special importance to us because it contains the basic principles of the young Emperor’s education. Bülfinger drew up a list of subjects Peter II was to learn and instructions on how these were to be taught and how to use the drawings of the *Kunstkamera* and the *Kunstkamera* itself. For example, in teaching military subjects Bülfinger suggested that ‘drawings and models should be shown’ to the student.³¹ In teaching astronomy, he recommended using ‘machines’, made according to ‘both the Ptolemaic and Copernicus’ systems, which are available in His Imperial Majesty’s *kunstkamera* [...]’.³² It was also recommended to study various rarities, gems, and coins, the more so as His Imperial Majesty had ‘enough of these rarities in his Rarity Chamber’. In this way he could ‘quickly acquire a considerable knowledge of these just by looking at them, so that he could reflect later on the value and use of such collections’.³³ But the order of 1727 was not fulfilled and engravings of the objects were not made at that time. In January 1730, Peter II fell ill with smallpox and died. Ostermann and also the directors of the Academy had other problems to attend to.

Preliminary drawings for illustrations in scientific publications

At the end of the 1720s there were clear indications that the Academy of Sciences had all the necessary materials at its disposal for every stage of production of a large-scale, illustrated publication, namely drawing, engraving, printing, colouring and binding. In 1728, the Academy started to publish *Plantarum minus cognitarum Centuriæ I* (-v) by Johann Christian Buxbaum, the German botanist who was one of the first batch of scholars to be employed by the Academy.³⁴ It included drawings that had been made during his journey to Constantinople with the Russian embassy.³⁵ This publication is a milestone in the development process of the corpus of drawings we now know as the ‘paper museum’ and was referred to in the 1741 catalogue of the *Kunstkamera* as ‘Icones pictæ rerum quæ in Academiæ thesauræ insunt’. The description of the individual boxes of these *Icones pictæ* state that they contain the original aquarelles for Buxbaum’s book. It is thus only natural that we have included them in our publication. Regrettably the draughtsmen’s names are unknown but it is possible that Maria Dorothea Gsell was among them. All the drawings of the ‘paper museum’ are known to have been made on paper;

30. G.B. Bilfinger, *Einrichtung der Studien Ihro Kayserl. Majest. Petri (...)*, [St Petersburg 1729].

31. *Ibid.*, p. 24.

32. *Ibid.*, p. 43.

33. *Ibid.*, p. 61.

34. J.C. Buxbaum, *Plantarum minus cognitarum centuria 1[-v] complexens plantas circa Bysantium et in Oriente observatas (...)*, St Petersburg 1728-1740.

35. See Sytin 2003.



36. See, for example, 'Numus Aegien-sis illustratus', in: *Commentarii Academiae scientiarum Imperialis Petropolitanae* (...), IV (1735), p. 264; V (1738), tab.XII. See also O.Ya. Neverov's article in the present volume.

the same applies to the botanical drawings in Buxbaum's *Centuriæ*, with the exception of four drawings on parchment: Buxbaum nos. 135, 170, 197, 322. (ill. 10 a, b and c) Since Maria Dorothea Gsell had ordered parchment for her work, it is possible that these four drawings are by her.

The example above demonstrates one of the functions of the 'paper museum'. When Buxbaum's publication had been completed, the drawings were kept for educational and research purposes. The coins and medals, however, show that this process could also occur the other way round. In this case, the starting point was the wish to have drawings of the complete numismatic collection and it was only afterwards that certain drawings were used for engravings in publications. Oleg Neverov mentions some examples in his article; here we would like to mention Gottlieb Siegfried Bayer who wrote descriptions of the Academy's collection of coins and published the results of his research in the periodical of the Academy mentioned above, *Commentarii Academiae scientiarum Imperialis Petropolitanae*.³⁶ (ill. 11)

The corpus of drawings as museum object

By the 1730s, the number of drawings in the 'paper museum' had become considerable. The drawings that have never been published are also of interest. They were used as museum exhibits in their own right, to be shown to visitors. This fact is mentioned in *Voyages en Anglois*



ill. 10a. Unknown artist, 1724-28, Green cormophyte *Mniobrium delicatulum* with moss capsules. Watercolour on parchment. Original of the drawing for Johann Christian Buxbaum, *Plantarum minus cognitarum*.... Archives of the Russian Academy of Sciences (St Petersburg branch), f. 1, op. 19, no. 4, leaf 135. ('Paper Museum' cat. no. 366)

ill. 10b. Unknown artist, 1724-28, Flowering plant of the Composite family. Watercolour on parchment. Original of the drawing for Johann Christian Buxbaum, *Plantarum minus cognitarum*.... Archives of the Russian Academy of Sciences (St Petersburg branch), f. 1, op. 19, no. 4, leaf 170. (*Paper Museum* cat. no. 405)

ill. 10c. Unknown artist, 1724-28, Flowering and fruit-bearing plant of the Cruciferae family. Watercolour on parchment. Original of the drawing for Johann Christian Buxbaum, *Plantarum minus cognitarum*.... Archives of the Russian Academy of Sciences (St Petersburg branch), f. 1, op. 19, no. 4, leaf 197. (*Paper Museum* cat. no. 432)

ill. 11. Unknown artist, Drawings of coins for the periodical of the Academy, *Commentarii*. Archives of the Russian Academy of Sciences (St Petersburg branch), f. XII, op. 2, no. 12

37. A. de La Motraye, *Voyages en Anglois et en Francois en diverses provinces et places de la Prusse ducale et royale, de la Russie (...)*, The Hague 1732.

38. Bespiatykh 1997, pp. 111-112.

39. *Ibid.*, p. 196.

40. See Appendix 2.

41. *Ibid.*

et en François en diverses provinces et places de la Prusse ducale et royale, de la Russie by Aubrey de La Motraye. He visited St Petersburg in 1726 and described the city in chapter three of his book, which was published in French and English.³⁷ He also mentions various plant drawings ‘to be or have been engraved’ that Schumacher showed him when he was visiting the *Kunstkamera* and the library, that was then still located in the former home of Alexej Kikin, a nobleman who had been executed. The drawings must have been those made for the botanical work by Buxbaum mentioned above. (See also the Introduction.)

Another visitor who mentioned the *Kunstkamera* in his memoirs was the Swede Karl Reinhold Berk, a ‘man of considerable learning’ specializing in coins and medals. He resided in St Petersburg in 1735-1736. His manuscript *Travels in Russia*³⁸ has a detailed description of the library and the *Kunstkamera*, where he mentions ‘depictions of all the medals, antiquities and other artefacts, in their natural colours and life-size or, if the latter is impossible, to scale’. There is a note in the manuscript stating, ‘the drawings have already made up twelve large volumes; when the work has been completed, the most striking drawings will be exhibited’.³⁹ No doubt, the drawings mentioned are those of our ‘paper museum’, which judging from his words, were already on display in 1735-1736 in twelve boxes in the new building on Vassilyevsky island. Also worthy of a notice is his remark concerning the exhibition to be organized when everything had been completed (drawn?). He also says that all the depictions were by Georg Gsell, except those of rare animals and plants depicted by his wife, Maria Dorothea (a comment that needs qualifying in our opinion). In other words, the corpus of drawings was a group of exhibits that the *Kunstkamera* boasted about and were to be shown to visitors. The series of by then 58 boxes is indeed described as an exhibit in its own right in the second volume of the *Kunstkamera* catalogue, *Musei Imperialis Petropolitani Vol. II*, published in 1741.⁴⁰ The manuscript of this catalogue⁴¹, which in contrast to the printed version gives the number of drawings per box, mentions a total of 2353 sheets at that stage. (This does not include the numismatic collection and other drawings that were produced later.)

The masquerade of 1739

When searching for the uses of our drawings, we sometimes stumbled on other drawing activities carried out in a different context to the ‘paper museum’ but that were indirectly connected with it. An infa-

mous event must be mentioned here in which foreign clothing in the *Kunstkamera* played a role, although ‘our’ drawings were probably only indirectly involved.

In 1739, ethnographic drawings were used for a masquerade. Clothes of various nations were required and the Secretary-in-Chief, Avraam Sverchkov, demanded information about the ‘clothes they wear and the emblems on rings’ from the Academy of Sciences, in addition to the actual costumes. The Academy replied that the Kamchatka Academy files on Cheremises, Chuvashes, and Votyaks comprised eight drawings. Not satisfied, the organizers of the masquerade requested that colour drawings of the clothes people wear be made on the basis of the collections and descriptions in books. It should be noted that ‘our’ drawings do not provide this sort of information and hence drawings of a different nature were necessary. Nevertheless, one of the sheets of the ‘paper museum’ has an inscription describing with disappointment the damage to one of the costumes used for the masquerade: ‘This drawing is the ninth of this jacket and it has been added, because of the other four kaftans received from the committee, one has been repaired or made anew and it has been decorated with different ribbons, not against nature.’⁴² (ill. 12)

Preliminary drawings for a printed book of plates

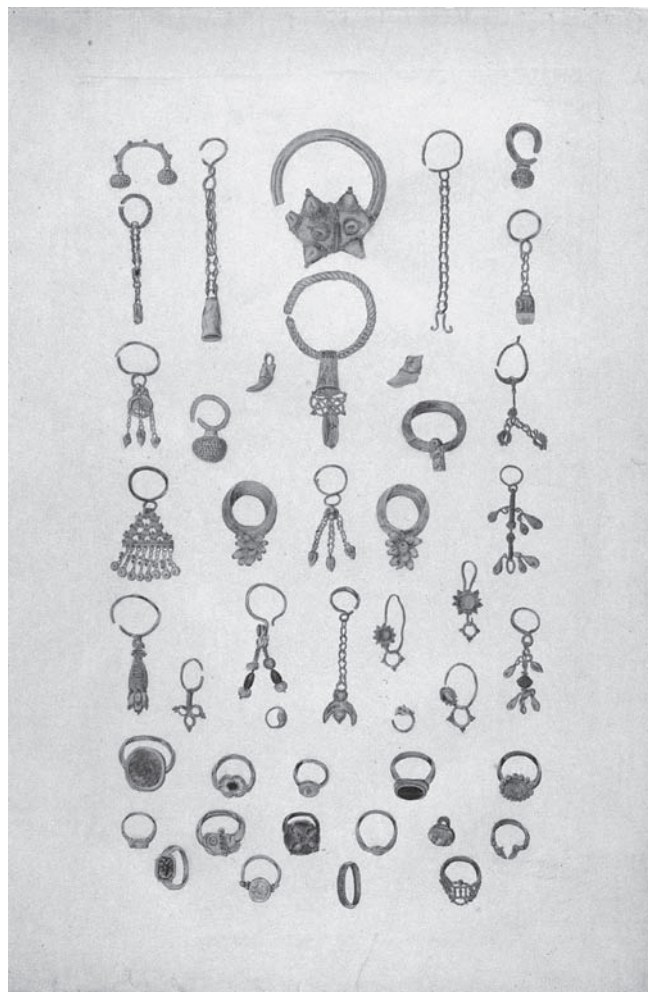
In 1741, the Academy published an engraved book on the museum and the library entitled *Chambers of the Library and the Kunstkamera of the St Petersburg Imperial Academy*.⁴³ Furthermore, the publication of the *Kunstkamera* and library catalogues had been completed by 1745.⁴⁴ Evidently a decision was made in the meantime to have engravings made for an illustrated deluxe edition, rather than a scholarly edition, as the engravers Ivan Sokolov and Grigory Kachalov requested on 18 January 1746 paints and copper plates ‘for cutting the *kunstkamera* curiosities’. Another letter explains that only engravings of drawings of the ‘*kunstkamera* curiosities and memorial objects’ were meant. The work was completed in April 1747, resulting in 26 plates that were examined by the engraving master Grimmel. Three copies were printed from each of these plates, which were then illuminated. On 5 December 1747, however, a fire took place that damaged the *Kunstkamera* and the engravings: ‘the sheets burnt, but the plates and the originals (i.e. the drawings – н.к.) were rescued’. In August 1748, it was decided that six prints would be made on quality paper from each plate.⁴⁵ Not all of the engravings are true to the original drawings. According to Galina Printseva’s description, the one depicting

42. SPbARAN, f. IX, op. 4, no. 432.

43. *Palaty Sankt-Peterburgskoy Imperatorskoy Akademii nauk biblioteki i Kunstkamery* [The Chambers of the St Petersburg Imperial Academy of Sciences, the Library and the Kunstkamera], St Petersburg 1741/1744.

44. *Bibliothecae Imperialis Petropolitanae*, pars 1- [4], [St Petersburg] 1742. The catalogue was published in 32 parts. *Musei Imperialis Petropolitanae Vol. 1-II*, [St Petersburg] 1741-1745. The volumes were not published in sequence, the first part of the second volume (1741) being published first, followed by the first part of the first volume (1742); the second and third parts of volumes 1 and 2 were not published until 1745.

45. Nowadays, the prints are preserved at the Hermitage (Department of the History of Russian Culture and the Library); some of these are at the Institute of Material Culture of the Russian Academy of Sciences, St Petersburg. The prints in the Hermitage Department of the History of Russian Culture are separate sheets, while those in the library are a bound volume called *Monumenta Sibirica*.



ill. 12. Unknown artist, 1730s,
Embroidered woman's robe
(Middle Volga region, early 18th c.).
Watercolour, Indian ink. Archives of
the Russian Academy of Sciences
(St Petersburg branch), f. ix, op. 4,
no. 432. (*Paper Museum* cat. no.
1082)

ill. 13. Forty-three ear rings, pendants
and a ring. Watercolour illuminated
engraving, with gilding. 1747.
The State Hermitage, inv. nr. PP-8892

the key to the town of Derbent, for example, is an exact copy of the drawing, which also applies to the engraving of the Gothic reliquary from Revall (see cat. nos. 922 and 941), while the depictions of smaller objects (rings, pendants and ear-rings) were arranged to make up different compositions. (ill. 13)

Some of the other drawings in our corpus have also been shown to be preliminary studies for prints, although it is not always clear whether they were for specific publications. The Academy has documented its print production in a series of 'Albums of engravings from plates', which can be a useful source of reference when searching for such prints. The second volume includes a signed portrait engraving of a drawing by Elliger; it also has prints showing details of the sitter's jacket and sword, and a separate engraving shows his hat and one of his shoes. The 'paper museum' contains the original drawing from which the last-mentioned print was made (cat.no. 834). As well as finding a print of one of our drawings in this way, we can identify who did the drawing. It is indeed probable that this detail drawing was done by the same artist as the complete portrait drawing itself, namely Elliger, especially as it is characterized by a craftsmanship that evidently was typical of Elliger. (ill. 14 and 15a and b)

The drawings as documentation

Another function was also possible. After the terrible fire of 1747, drawings of the museum collections were used when replacing the objects. For instance, in 1753 copies of several drawings of objects from the Chinese collection were given to the physician F. Elachich, who was going to China to purchase replacements of the missing objects shown in the drawings.⁴⁶ The drawings were executed in a hasty manner and, unlike the drawings of the 'paper museum', without attention to detail. Generally, they are strictly functional, their aim being to give an idea of the object and the material it is made of. Elachich fulfilled his mission. In 1754, the *Kunstkamera* obtained 'a lot of Chinese and Tartar rarities', of which a part was said to have been brought 'by the physician Elachich, who went to China with a convoy and was commissioned to collect rarities'.⁴⁷

Ethnographic book illustrations indirectly related to our corpus

When trying to determine the aims and uses of the 'paper museum', it is not always easy to identify a *direct* connection between individual prints and book illustrations. The following examples in the field of

46. See Shafranovskaya 1969.

47. J. Bacmeister, *Opyt o biblioteke i Kabinete redkostey i istorii natural'noy Sankt-Peterburgskoy Imperatorskoy Akademii nauk* [Essay on the library and the Department of Rarities and Natural History of the St Petersburg Imperial Academy of Sciences], St Petersburg 1779, p. 128.



ethnographic publications suggest that drawings in the ‘paper museum’ were used in certain cases for the illustrations, even though some of them are not precisely recognizable in the prints.

In the 1770s, ethnographic drawings began to be used as illustrations for magazines, e.g. *Otkryvayenaya Rossiya*: ‘Russia discovered, or Collection of Costumes of All the Peoples of the Russian Empire’, published in 1774–1776.⁴⁸ Twelve issues came out, financed by the bookseller Karl Wilhelm Müller. There were no texts, only engravings. According to the *Complete Catalogue of Russian Eighteenth-century Books*, ‘in choosing the materials, several scientists assisted the engraver Ch. M. Grot, but their names are unknown’.⁴⁹ The magazine engravings were used in *Beschreibung aller Nationen des Russischen Reichs* (St Petersburg, 1776–1780) by Johann Gottlieb Georgi. The German as well as the Russian edition of 1799 contain extensive information on the customs and traditions of the peoples living in the Russian Empire. In the introduction, Georgi points out that the depictions were by the engravers Roth and Schlepper, partly executed *from the drawings* (italics mine – N.K.) and figures of the *Kunstkamera* of the Imperial Academy of Sciences and partly from real people.⁵⁰ Seven newly discovered original engravings of drawings in pen and Indian ink with washing bear Berckhan’s signature. One is signed T.E.T. (Terentyev Efim?), i.e. one of the participants of the ‘paper museum’.⁵¹ The costumes in our drawings (ill. 18, 19) are worn by conventionally depicted people of different nations on these prints, their postures being untypical of real people. (ill. 16, 17) The fact that the clothes in the ‘paper museum’ drawings are depicted in a very different way, namely as if on a coat-hanger, has been a reason for doubts as to whether the drawings were intended to be engraved. There is a print executed in the 1730s, however, that shows the coat of a uniform depicted in a similar manner. (ill. 20) In this context, one cannot be absolutely confident whether the ‘paper museum’ drawings were destined for engraving or not.

The reprise of the print project in 1774

In 1774 a Commission of the Academy of Sciences took the decision to resurrect the old project dating from 1746–1747 to have the *Kunstkamera* objects engraved. It is interesting to read the explanation of the commission that made this decision: ‘Since the Academy engravers have not been engaged in their [professional] activities for some time, [and] while the commission inspecting copper plates has discovered that during the presidency of His Excellence, Count Kirill

48. *Otkryvayemaia Rossiya, ili sobranie odezhd vsekh narodov v Rossiiskoy imperii obretayushchikhs’a* [Russia discovered, or Collection of Costumes of All the Peoples of the Russian Empire], St Petersburg 1774–1776, nos. 1–12.

49. *Svodnyi katalog russkoy knigi XVIII veka* 1966, p. 160.

50. J.G. Georgi, *Opisanie vseh v Rossiiskom gosudartsve obitayushih narodov (...)* [The description of all the nations inhabiting the Russian State(...)], St Petersburg 1799, p.XV

51. I am grateful to A.N. Abfertyeva for the opportunity to view these drawings.

ill. 14. Ottomar Elliger, 1728–35, Hat with feathers and shoe. Watercolour. Archives of the Russian Academy of Sciences (St Petersburg branch), f. IX, op. 4, no. 446. (*Paper Museum* cat. no. 834)

ill. 15a. Ottomar Elliger, Portrait of a man. From ‘Albums of engravings from plates’. Archives of the Russian Academy of Sciences (St Petersburg branch), f. XII, op. 2, no. 12

ill. 15b. Ottomar Elliger, Hat with feathers and shoe. From ‘Albums of engravings from plates’. Archives of the Russian Academy of Sciences (St Petersburg branch), f. XII, op. 2, no. 12

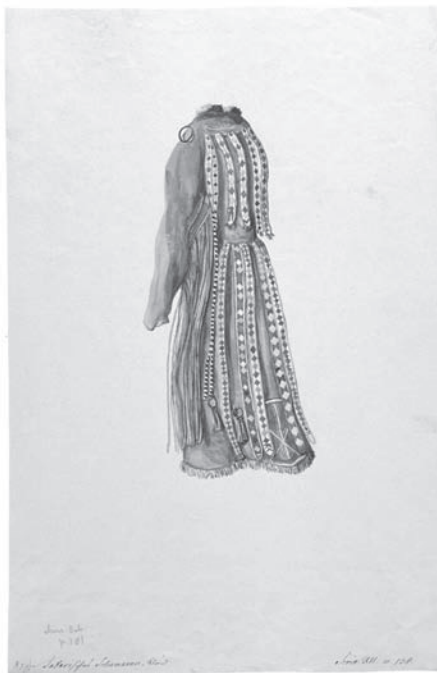


*Мунгуской Шамана при рѣкѣ Аргунѣ сзади.
Ein Tungusischer Schaman am Argun-Fluss rückwärts.
Devin tourangout. auprès de l'Argoun par derrière.*



ill. 16. Tungus shaman of the Argun river. Engraving from Johann Gottlieb Georgi, *Beschreibung aller Nationen des Russischen Reichs* (St Petersburg, 1777) part 3, plate 59

ill. 17. Tungus shaman of the Argun river. Engraving from Johann Gottlieb Georgi, *Beschreibung aller Nationen des Russischen Reichs* (St. Petersburg, 1777) part 3, plate 63



ill. 18. Unknown artist, 1730s, 'Grand' shaman's kaftan. Watercolour, gilding, Indian ink. Archives of the Russian Academy of Sciences (St Petersburg branch), f. ix, op. 4, no. 368. (*Paper Museum* cat. no. 1042)

ill. 19. Unknown artist, 1730s, Shaman's clothing. Watercolour, gilding, Indian ink. Archives of the Russian Academy of Sciences (St Petersburg branch), f. ix, op. 4, no. 369. (*Paper Museum* cat. no. 1043)

ill. 20. Unknown artist, Uniform coat. From 'Albums of engravings from plates'. Archives of the Russian Academy of Sciences (St Petersburg branch), f. xii, op. 2, no. 12

Grigoryevich Razumovsky, some of the plates were cut, representing ancient golden Tartar and other rarities preserved in the *Kunstkamera* and the Medal Collection, the number of plates cut being not less than twenty-six, the Academy commission has taken the decision that the cutting of the plates be continued, both for the exercise of the idling engravers and for the completion of engraving the said plates, and in the absence of other necessary tasks, the engravers must be engaged in cutting the copper [plates] under contract.⁵² According to the ledger, the warehouse of the Academy of Sciences had thirty-six plates made for the ‘Book of the *Kunstkamera* Curiosities of the Numismatic Collection’ in 1803, plus 51 plates (of which 39 had been engraved), while depictions of *Kunstkamera* objects had been removed from 12 plates. These were used for making engravings for the ‘Book of Differential Calculus’. In addition the ledger mentions nine other plates with depictions of *Kunstkamera* objects.

A new attempt at a reprise in 1839

In the 19th century, the ‘paper museum’ continued to attract scientists’ attention. In 1839, the member of the Academy P. Koeppen suggested that the drawings of the *Kunstkamera* archæological collection should also be published.⁵³ His argument in favour of this clarifies the situation and hence is quoted at length. Koeppen asked: ‘What has so far been done for the preservation of the memory of these objects? Undoubtedly not enough! It was as early as the beginning of the last century,’ he reminds us, ‘that Witsen⁵⁴ and Strahlenberg⁵⁵ presented depictions of various objects found in kurgans [burial mounds in Siberia]. Bacmeister’s description of the library and the collections of the Academy of Sciences⁵⁶ shows that Count Razumovsky, who was the President of the Academy between 1746 and 1766, even ordered that drawings of all the objects belonging to the Academy collections be executed and engravings of the drawings made, but once started the work remained unfinished. We only know,’ Koeppen continues, ‘that the prints of the twenty-six sheets prepared are extremely rare and that the copper plates with depictions are virtually unrecoverable.’⁵⁷ But the loss in that case does not seem to be too great because in the context of a deficit of texts and their inept format, some of the objects [...] in Razumovsky’s days were so badly represented that one could not but admit that they were absolutely useless. However, this applies only to the depictions that have oriental inscriptions. This makes it desirable,’ he explains, ‘that the Academy decides to have the depictions of all the objects published that are known to have been

52. Alekseeva *et al.* 1985, pp. 150–151.

53. SPBARAN, f. 1, op. 2 - 1839 10 para. 194, 31 March 1839.

54. There were three Amsterdam editions of Nicolæus Witsen, *Noord en Oost Tartaryen*, viz. 1692, 1705, and 1785.

55. Philipp Johann von Strahlenberg, *Das nord- und ostliche Theil von Europa und Asia (...)*, Stockholm 1730.

56. Bacmeister 1779.

57. Some of the copper plates are preserved in the State Russian Museum, some in the Archives of the Russian Academy of Sciences in St Petersburg.

unearthed from graves'. He therefore suggests that 'a special publication of objects found in graves could include the following objects: skulls; stone objects, weapons, hammers or axes; clay vessels; wooden objects; glass objects (beads, vessels, etc.); and metal objects: rings, ear rings, wreaths (found on skulls), bracelets, clasps, various tools, mouldings, plaques, buttons, bells, cups, scoops, etc., and especially coins.'⁵⁸ In spite of the fact that the Academy took the decision to support Koeppen's idea, the drawings were never published.

58. SPBARAN, f. 1, op. 2 - 1839 10
para. 194, 31 March 1839, leaf. 4.

Conclusions

The process of making drawings of objects preserved in the *Kunstkamera* was never discontinued, although it was alternately ceased and suddenly resumed, as indicated by the dates of the extant watercolours. However, to sum up: the purpose of producing the drawings is not absolutely clear. Being close to the Court, the St Petersburg Academy and the *Kunstkamera* had to carry the burden of those changes that imbued the history of Russia in the first half of the eighteenth century. But the person who de facto headed the Academy, Johann Daniel Schumacher, was very dexterous in reacting to these changes. As the above evidence suggests, changing demands resulted in changing purposes for producing the drawings.

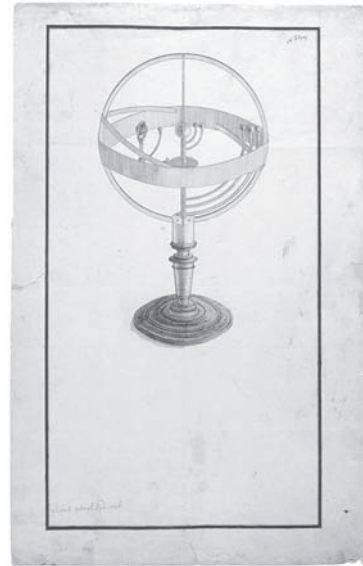
It is hardly a coincidence that Peter the Great commissioned Maria Dorothea Gsell to draw the *Kunstkamera* objects. Before coming to St Petersburg, she had produced watercolours with her mother, Maria Sibylla Merian. In addition to being gratifying to the eye, these watercolours were characterized by faithful rendering, which was necessary for teaching purposes. The idea of creating the *Kunstkamera* drawings resulted not only from their political but also from their educational significance. Although the number of prints that would be absolutely concordant with the respective drawings is very low, there are enough for the tentative conclusion to be made that those drawings which have a line frame or those marked 'Tab' were to be engraved. Examples include a *Surinam Pipa* (ill. 21), a *Globe* (ill. 22) and a *Quadrant* (ill. 23). We can assume, however, that most of the drawings that were engraved were not returned to the *Kunstkamera*. These drawings and the manuscripts they illustrated became part of the archival fund of the scientist who had produced the manuscript. Compare, for instance, ill. 24 for the work by A. Kaau-Boerhaave or the watercolours depicting the materials of the 2nd Kamchatka expedition, which are also in scientists' archival funds. It is possible, therefore, that the lack of corresponding drawings and prints in the publications of the Acad-

ill. 21. Andrey Grekov, 1732,
Toad (*Bufo marinus*?). Indian ink.
Archives of the Russian Academy of
Sciences (St Petersburg branch),
f. IX, op. 4, no. 706. (*Paper Museum*
cat. no. 74)

ill. 22. Pyotr Ermolayev, 1730s,
Orrery on a black lathed wooden leg.
Watercolour, Indian ink. Archives of
the Russian Academy of Sciences
(St Petersburg branch), f. IX,
op. 4, no. 744. (*Paper Museum*
cat. no. 529)

ill. 23. Pyotr Ermolayev, 1730s,
Wooden Davis quadrant. Water-
colour, Indian ink. Inscribed (in the
right upper corner): *Tab.* Archives of
the Russian Academy of Sciences
(St Petersburg branch), f. IX,
op. 4, no. 749. (*Paper Museum*
cat. no. 533)

ill. 24. Child with development anom-
alies. Pencil on paper. Drawing from
Abraham Kaau-Boerhave's manu-
script of *Historia anatomica*
infantis... (St Petersburg, 1754)
Archives of the Russian Academy
of Sciences (St Petersburg branch),
f. 3, op. 1, leaf 60

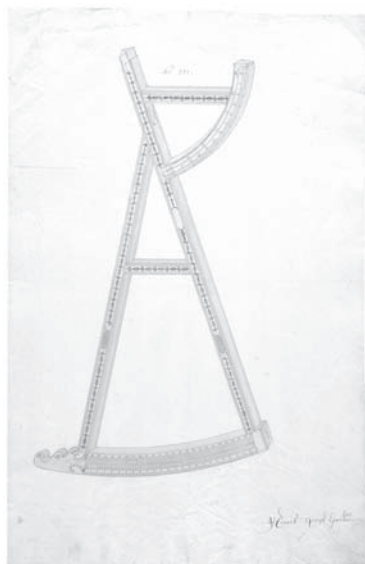


emy can be accounted for by the simple fact that the drawings preced-
ing the prints are no longer in the corpus of the 'paper museum' and
hence could not be included in this publication.

It should also be remembered that some of the drawings were lost
in the fire of 1747. After the fire, an order was made to draw up a list
of the objects lost. According to Berckhan's and Andrey Grekov's re-
ports preserved in the Archives of the Academy of Sciences, Grekov's
Drawing Workshop lost five original drawings of Siberian herbs and
30 copies of them, while Berckhan reported 237 drawings to have
been rescued, viz. '3 drawings of herbs, [...] 21 drawings of fish,
14 drawings of birds, 4 drawings of animals, 9 drawings of fungi, [...
and] 30 drawings of various Siberian peoples in colour'.⁵⁹ Questions
that arise in this connection are another indication that the present
publication is the beginning of research that has yet to be finished.

The use of the *Icones pictæ rerum quæ in Academiae Thesauris*
insunt was not limited to the creation of illustrations for scientific
publications. For example, marginalia referring to the Messerschmidt
objects or to Montfaucon's edition suggest that that the drawings were
used for the study of collections. In the 19th century, they served for
the reconstruction of the objects depicted. In *Siberian Antiquities*,

59. SPBARAN, f. 3, op. 1, no. 112.



V.V. Radlov mentions a deer Gerhard Friedrich Müller had sent to the *Kunstkamera* from Siberia in the 1730s: ‘At present, the deer has no antlers, therefore the present wood-cut is based on the old drawing that, in the last century, the Academy of Sciences planned to publish in the description of the *kunstkamera*.’⁶⁰

The documents at our disposal also confirm that the collection of drawings known as the ‘paper museum’ was used to create scientifically based illustrations for the Academy publications, for studying collections, for engravings illustrating the *Kunstkamera* catalogue and for replacing lost museum objects. Elena Stetskevich deals separately with another important function elsewhere in this publication, namely teaching the students of the Drawing and Engraving Chambers of the Academy. Many of the problems connected with determining the purpose of the *Icones pictæ rerum* of the St Petersburg Academy of Sciences may be resolved if new evidence is found concerning the use of the drawings, their history and most importantly of all, what drawings could the ‘paper museum’ originally have included other than the more than 2000 sheets that we know of to date.

60. Radlov 188-1902, part 1-3 (1894), p. 827.

THE FORTUNES OF THE
KUNSTKAMERA DRAWINGS
IN THE NINETEENTH AND
TWENTIETH CENTURY

Galina A. Printseva

Since their production, the drawings depicting the *Kunstkamera* objects have travelled a long road, parts of which remains unmapped. It is known that the majority were made in the mid-1730s and 1740s and that the flow of work gradually came to a halt in the late 1750s. As already mentioned in the introduction, the drawings were originally stored in 58 boxes, classified according to theme. According to Johann Daniel Schumacher's publication *Chambers of the St Petersburg Academy of Sciences, Library and Museum* (1741/1744) these boxes were housed in room UU situated in the left wing of the ground floor. (Introduction, ill. 4 and 6) The storage boxes are made of cardboard covered with leather and are decorated with embossed gilt vignettes showing a double-headed eagle in the centre of the front cover. At present nineteen of these boxes can still be traced.¹ Six are to be found in the Hermitage: one with drawings of precious objects (*Icones adparatus pretiosi*, 132 sheets) and five with drawings of coins and medals. Thirteen volumes are in the Archives of the Russian Academy of Sciences. Finally, the Russian Museum is in charge of 121 loose sheets. Since the search for the drawings is still underway, it is likely that more of these will be recovered in the various specialised museums of the Academy of Sciences, where parts of the *Kunstkamera* collection have been deposited since the 1830s. The museums concerned are those of zoology, archaeology, palaeontology, botany, the navy and artillery which were founded during the nineteenth century, along with various technological museums – like the Museum of the Institute specializing in the History of Science and Industry – and a number of educational institutions. Re-distribution of the collection was continued after the Revolution of 1917. This makes it difficult to reconstruct the path these drawings took before arriving at their present address. Our information with regard to their provenance can be summed up as follows.

First of all, we do not know how many drawings perished in the fire that broke out in the *Kunstkamera* in 1747. Since this disaster affected mainly the upper floors of the building, it is possible that the majority of the boxes of drawings in the UU room survived; besides there are no archival records to the effect that the fire destroyed a considerable number of drawings, nor is there any evidence that they were transported elsewhere in the following decades. It can therefore be assumed that the drawings were in the *Kunstkamera* until they were transferred to the branch museums, together with the respective collections. The following evidence supports this. In September 1894, the Department of Antiquities at the Hermitage received from the Museum of Archaeology of the Imperial Academy of Sciences six boxes of drawings

1. See Appendix 3.

containing *Kunstkamera* objects. This means that both the drawings and the collections they depict were transferred from the *Kunstkamera* to the Museum of Archaeology before 1894. On 29 November of the same year, five of these volumes, containing mainly depictions of coins were transferred to the Department of Numismatics (*Münzkabinet*) of the Hermitage. What happened to the sixth box at that time is not known.² I shall return to this question at the end.

A part of the collection of drawings stayed in the *Kunstkamera* until the nineteen-thirties. The Archives of the Russian Academy of Sciences has records (for the year 1934) of a transfer of a collection of drawings from the *Kunstkamera* to the Archives, which took place on 7 April 1934. This was ‘a collection of eighteenth-century watercolours after *Kunstkamera* objects, in six leather-bound boxes with embossed gold vignettes, containing the following groups of drawings:

1. Chinese: 242 sheets (folio), plus 4 double sheets (folio) + 10 sheets (quarto), plus 2 sheets cut from those of folio size
Total: 258 sheets.
 2. Siberian: 100 sheets (folio).
 3. Central Asian: 15 sheets (folio), plus 1 (quarto)
Total: 16 sheets.
 4. Archaeological: 41 sheets (folio) + 4 double (folio) + 1 sheet cut from a folio size sheet.
Total: 46 sheets.
 5. Miscellany (mostly Western European): 135 sheets (folio) + 2 double sheets + 2 sheets (quarto) + 4 sheets cut from folio size sheets.
Total: 143 sheets.
- Total of the five groups: 563 sheets.³

On arrival at the Archives, all the drawings were registered by inspector A. Chernikov. They were incorporated into collection IX and registered in inventory 4, with inv. no. 1-570 (the extra numbers running from 564 to 570 are the result of the registration of each of the double sheets (folio) under a number of its own.)⁴

In the same period this collection in the Archives of the Academy of Science was to receive an addition from a completely different source. In 1938, E.V. Petrova (residing at 26, Vosstaniya Str., flat 1) was to offer to sell them her eighteenth-century drawings of *Kunstkamera* objects. On 4 November 1938, the drawings were shown to a group of experts including Academician V.V. Struve, Director of the Archives G.A. Knyazev, and senior researcher Modzalevsky, who drew up a protocol to the effect that the drawings were ‘genuine,

2. See Imperatorskii Ermitazh [Imperial Hermitage], vol. 2 of the Department of Antiquities for the recording of new acquisitions [in] 1893-1914, p. 14.

3. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f. IX. The inventory of documents in collection IX, fol. 1.

4. *Ibid.* Reception confirmed on 22 July 1935.

depicting objects preserved at the *Kunstkamera*: monsters, animals, instruments, etc.) fifty items in total.’ The experts came to the conclusion that the drawings did belong to the *Kunstkamera* collection, making up for gaps in a similar collection preserved at the Archives of the Academy of Sciences.⁵ The drawings were priced at 35 roubles each, which came to a grand total of 1750 roubles for the entire collection. Besides, Petrova gave away five designs free, ‘to various Academy publications’. All of these were added to collection IX, inventoried under nos. 571-625.⁶

One year later, on 11 November 1939, the experts visited E.V. Petrova again (probably at her invitation) to purchase more drawings from her collection, some of which, mostly ‘drawings of some artistic value’, she reported had already been sold to the Russian Museum. Other drawings (mostly of instruments) had been sold to the former Chamber of Weights and Measures Museum. The rest, about two dozen (‘monsters’ and instruments) were offered to the Archives.⁷ On 28 November 1939, the director of the Archives did indeed purchase ‘twelve drawings of monster human beings, 14 drawings of instruments and one dancing figure, bringing the total to 27 drawings, 1450 roubles paid for the lot’.⁸ Those drawings, too, were added to collection IX, inventory 4, and registered under nos. 732-759. It can be concluded therefore that the drawings still preserved at the Russian Museum today were purchased from E.V. Petrova in 1939 and that no watercolours after *Kunstkamera* objects were obtained by the Archives of the Russian Academy of Sciences after this date (backed up by the fact that the numbering still only goes as far as 759).

This leaves the puzzle of the 107 sheets, inventoried in the gap between the two groups mentioned above (nos. 626-731) which must have been acquired before the registration of the second acquisition of 1939, because the numbers were then ‘passed over’. According to the inspection report on 759 eighteenth-century drawings (dated 20 September 1945), in addition to the purchases from Petrova in 1939, work had been acquired from the Museum of Zoology.⁹ Those must have been the 107 items just mentioned, although the report gives no information concerning either the number of drawings received from the Museum of Zoology nor descriptions. According to the latest inspection report dated 17 September 1971, collection IX contains 759 drawings.¹⁰ In addition to these more than 350 botanical drawings have been preserved in collection I which were also once part of what we now call the ‘paper museum’. What happened to the rest of the drawings of plants and flowers – there must have been several hundred – is at the present moment not known (see Introduction).

5. SPBARAN, f. IX, op. 4, no. 26 (obverse and reverse).

6. *Ibid.*, no. 26 (reverse).

7. *Ibid.*, no. 44.

8. *Ibid.*, no. 45.

9. SPBARAN, f. IX, op. 1, no. 146.

10. *Ibid.*, no. 97.

Let us leave the history of the acquisition of drawings by the Archives of the Russian Academy of Sciences and the Russian Museum for the time being, and try to figure out how the drawings arrived at the third location of the paper museum, the Hermitage.

The adventures of the box of drawings of valuable objects, the *Icones Adparatus pretiosi* which is now to be found in the Hermitage, can be reconstructed along the following lines. The key to its whereabouts lies in an event that took place in 1927 but unfortunately there is no documentary evidence to support this explanation. According to A.A. Ivanov, then head of the Oriental Department, the box had a tag, later lost, inscribed: 'Borrowed by Borovka in 1927'. Most probably, this was vol. 6 of the drawings received by the Hermitage from the Museum of Archaeology of the Academy of Sciences in 1894, the unspecified box mentioned earlier. It must have been preserved at the Department of Antiquities of the Hermitage, from which Borovka borrowed it. After that, the volume was first at the photo archive of the Oriental Department, and, in 1964, it was transferred to the Department of the History of Russian Culture, where it is still kept.

Grigory Iosifovich Borovka (1894-1941), a well-known archaeologist of classical antiquities, worked at the Hermitage from 1917 onwards. In 1927 he was appointed head of the Department of Hellenic and Scythian antiquities and in that same year he organised a permanent exhibition at the department, for which he required the volume of *Icones Adparatus pretiosi*, containing principally depictions of the items of the Scythian (Siberian) collection. This renowned scholar, a member of a noble St Petersburg family of German extraction, was arrested in 1930. The reason for his never returning the box to the Department of Antiquities must have been related to his arrest.¹¹

In addition to this set of drawings in the Hermitage collection it was also possible to trace some other acquisitions. These included donations by private individuals, e.g. 26 representations of scientific instruments, of which 16 were acquired in 1956, through the Purchasing Committee of the Hermitage, from a certain Ms. Ermolinskaya, and 10 were given to the museum in 1976 by V.M. Chenakal, director of the Lomonosov Museum. At present the Department of the History of Russian Culture in the Hermitage has 164 drawings of *Kunstkamera* objects. In addition to this, the collection includes ten illuminated engravings of *Kunstkamera* drawings (these are engravings which, as explained elsewhere in this book, were produced in 1748). These, too, must have been borrowed by Borovka, for they were preserved at the Oriental Department together with the above-mentioned box of drawings of precious objects, both subsequently transferred to the Department of the History of Russian Culture.

11. It was fairly common for sets of drawings to be lent out for study purposes. For instance, in 1922 Academician J.A. Orbeli, head of what in 1926 was renamed the Oriental Department, borrowed from the *Kunstammer* six boxes containing 571 drawings, returning them shortly afterwards (see SPBARAN, f. 142, op. 1-1922, no. 6).

Apart from in the Department of the History of Russian Culture, *Kunstkamera* drawings are preserved at the Department of Numismatics, viz. one folder containing 26 leaves with drawings of medals from the reign of Peter the Great. Judging by the watermarks, the drawings were done at the same time as the depiction of the other objects. Comparison of the drawings and the descriptions of the medals themselves in the catalogue of the *Kunstkamera*, *Musei Imperialis Petropolitani Vol. II* (1745), would suggest that these were preparatory sketches intended as models for the engravings for an illustrated catalogue. When the drawings came to the Hermitage is unknown. Most probably they were received in the 1920s together with other materials from the Academy of Sciences, and, being regarded as auxiliary materials, they were not mentioned in the acquisition documents. The drawings show reproductions of fewer than half of the medals at the *Kunstkamera* commemorating different events that took place during the reign of Peter the Great, for the 1745 catalogue includes a total of sixty-six medals dating back to that period.¹²

Further drawings are to be found at the Library of the Department of Numismatics where they have five boxes with depictions of Greek and Roman coins from the *Kunstkamera* collection. These boxes have been mentioned before: they were transferred in 1894 from the Museum of Archeology to the Hermitage, and were probably moved along with the actual coins shown in the drawings.¹³

The burning question is whether further drawings can be tracked down elsewhere. Perhaps these notes on the adventures of the loose-leaf drawings known to us may inspire others to do more research into the present whereabouts of the missing material.

12. See the contribution by E.S. Shuchukina in the present publication.

13. For details concerning these drawings, see O. Neverov's contribution in the present publication.

ANATOMY

Anna B. Radzyun

The collection of the Archives of the Academy of Sciences includes a series of 22 sheets of anatomical drawings. Undoubtedly, this series represents only a small proportion of the drawings of anatomical specimens preserved in the *Kunstkamera* that were produced during the period under review, but most of which have not yet been found. The catalogue of 1741 records three boxes of *Icones figurarum anatomicarum*, one box of *Icones foetorum* and one box of *Icones monstrorum*, which constitute about 350 drawings in total, assuming that each box contained about 70 drawings. Almost all of the 22 sheets discussed below must have been kept in the box marked *Icones monstrorum*. They show children (foetuses) with abnormal developments, which were brought together from all over Russia as a result of Peter the Great's 'Order concerning monsters' of 13 February 1718. The drawings are life-size. None of them have been signed and they are very seldom dated.

Three of the 22 drawings are worthy of special mention, as the children depicted may have come from the collection of the Dutch anatomist Frederick Ruysch. Peter the Great had bought this collection in Holland in 1716. Cat. no. 13 shows a child with a congenital anomaly in the extremities, which is recognizable as the extant injected specimen catalogued (in 1948) as no. 4070-907 in the Ruysch collection; cat. no. 1, a newly-born boy with cerebral dropsy and artificially blue eyes, is almost certainly no. 4070-917 in the Ruysch collection. The child depicted in cat. no. 21 has not been found in the *Kunstkamera* collection. Although we cannot be certain about the origin of this drawing, the specimen could possibly have been prepared by Ruysch.

At first glance, the drawings seem to have been produced by at least two artists. Some of the drawings (cat. nos. 2, 4, 5, 7, 8, 9, 12, 15, and 16) have been done with brush and Indian ink, using a somewhat dryish, harsh technique. The second group of drawings (cat. nos. 1, 3, 6, 10, 11, 13, 14, 18, 19, and 22) is also in Indian ink, but with a slight emphasis in pink. Washing to create three-dimensionality and accentuate shadows can also be discerned, as well as traces of the original pencil sketch. Andrey Grekov was most probably responsible for this group of drawings; he was not only a draughtsman, but also curator of the anatomical specimens for a number of years. It is possible that he was responsible for the first group of drawings as well. The dryish manner in which they are painted is incongruent with Grekov's specific style, but may reflect the state of the specimens and/or the purpose of the drawings, e.g. subsequent engraving and publication in such works as *Syndesmologia* by Josiah Weitbrecht or the 1754 dissertation on 'monsters' by Abraham Kaau-Boerhaave. A remark by

1. Kopelevich 1978.

Weitbrecht in 1737 in the introductory speech to his anatomy course confirms Grekov as the artist: 'The drawings, albeit not all of them, are by Andrey Grekov; the engravings are by Grigory Kachalov and Ivan Sokolov or their apprentices'.¹ In addition to this draughtsman, some of the 22 drawings that have been preserved are recognizable as the work of apprentices. That apprentices used anatomical objects to practise drawing is shown by two drawings (cat. nos. 2 and 3) of the same specimen, a child with an 'Ethiopian' birthmark on the forehead.

In the source publication *Materialy dlya istorii Imperatorskoy Akademii nauk* ('Materials for the history of the Imperial Academy of Sciences'), the majority of the descriptions of the babies with congenital deformities that were brought to the *Kunstkamera* are not clear enough to be used to identify the drawings. A comparison of the drawings with the objects still in the *Kunstkamera*, however, did have results: 90 percent of the drawings could definitely be identified as depictions of objects dating from the first museum collections. Photographs of the extant specimens confirm their similarity to the old drawings in the archives.

The book you are now reading is first and foremost about the function of the 'paper museum' as part of the inventory of the first Russian museum or as a preparatory phase of an illustrated catalogue. I would like to point out another very important function of the drawings: they helped the Academicians, as illustrations can clarify a verbal description for readers or a lecture audience. Collaboration between the artist and the anatomist was (and still is) not only fruitful, but also necessary. A drawing could, as it were, become the scientist's tool; it is therefore no coincidence that many scientists were also outstanding draughtsmen. A classic example is Leonardo da Vinci. He was the first to consider a drawing to be a reliable record of what one saw during a dissection, as well as a very useful aid in teaching the anatomy of the body. Why use words when you can draw? Leonardo's approach remained valid in later anatomical research. Frederick Ruysch and Caspar Friedrich Wolff were excellent draughtsmen too. Even for Ruysch, who was capable of preparing specimens for educational purposes with the help of his unique method of conserving the tissues of a dead body, the practice of drawing specimens did not lose its significance.

Thus as well as drawing the objects in the *Kunstkamera*, the draughtsmen worked for the members of the Academy of Sciences. The *Kunstkamera* was not only a museum; it also formed the basis of the Academy of Sciences. Hence it was logical to look for drawings done for the early anatomists working there. A search carried out in

the Archives of the Academy yielded a wide variety of sketches depicting what one saw during anatomical dissections. The drawings were used both for demonstration purposes during the anatomists' public lectures and as illustrations in published research materials. Johann Georg Duvernoi, Josiah Weitbrecht, Abraham Kaau-Boerhaave and Caspar Friedrich Wolff followed this practice. Some anatomists, like Caspar Friedrich Wolff, did their own drawings. To what extent this type of drawings were originally kept in the five 'anatomy' and 'monsters' boxes is still unknown, so we have decided not to include them in this catalogue. These drawings do, however, deserve some attention in this introduction.

Duvernoi, the first anatomist who came to Russia from abroad, had previously served at the court of Württemberg in Reichenweier as a physician and physicist, after which he had been made an extraordinary professor at the University of Tübingen. In St Petersburg, he dissected both human bodies and wild animals, such as a lion, a lynx, an elephant and a whale. His manuscripts, preserved in the archives, contain excellent pictures. He collaborated at different periods with the artists J.G. Brucker, Georg Gsell and Andrey Grekov. Excellent large-format drawings of elephant organs were produced by Georg Swenter. All that is known about Swenter is that he came from Germany and was paid sixty roubles for this work. Usually, however, it was Georg Gsell, the first artist to be appointed by the Academy of Sciences, who worked with Duvernoi. He is known to have made illustrations for Duvernoi's work on the respiratory organs of a whale (1735) and on the internal organs of a lion and a seal. Duvernoi's archive contains an inventory of drawings which J.G. Brucker did for him.² The majority of these have been preserved. Grekov's anatomical drawings are the most difficult to identify; he did not sign them because working with anatomists was one of his routine responsibilities. You are more likely to come across his signature on depictions of ethnographic objects, such as Chinese flasks.

Duvernoi began submitting his contributions to *Commentarii*, the journal of the Academy of Sciences, as early as 1726 when the first issue was published. It was not until 1728, however, that the name of the engraver (Christian Wortmann) appeared in connection with the illustrations for his article.³ From 1729 onwards, Ottomar Elliger also made anatomical drawings for Duvernoi.

When Duvernoi returned to Germany in 1741, he was succeeded by Josiah Weitbrecht. In 1729 Weitbrecht had started work on a catalogue of the anatomical section of the collection of Frederick Ruysch. The result, a thick notebook giving a Latin inventory of the collection

2. *Opis' risunkam, sdelannym risoval'shchikom I.O. Brukerom k rabotam I.G. Duvernoi* [Inventory of drawings made by the draughtsman J.O. Brucker for the works of J.G. Duvernoi], see St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f.1, op. 4, no. 15.
3. Io. Georg. Du Vernoi, 'Descriptio vasorum Chyliferorum', in: *Commentarii Academiae Scientiarum Imperialis Petropolitanae* 1 (1728), pp. 262-296, 343-350, tab. 12, p. 296. See also: *Commentarii Academiae Scientiarum Imperialis Petropolitanae* 11 (1729), tab. 26, p. 102.

4. SPBARAN, f. IV, op. 1, no. 108.
See Ginzburg 1953.

5. J. Weitbrecht, *Syndesmologia, sive historia ligamentorum corporis humani*, St Petersburg 1742.

6. *Materialy* 1885-1900, vol. 10,
pp. 41-42.

7. A. Kaau-Boerhaave, *Historia altera anatomica infantis, cuius pars corporis inferior monstrosa*, St Petersburg 1757.

written (at least in Ginzburg's opinion) in Weitbrecht's hand, is now in the Archives of the Academy of Sciences.⁴ But the principal work of his life was a manual of syndesmology (the description of syndesmosis, the connection and union of skeletal bones), the first in the world.⁵ This illustrated book in Latin was published in St Petersburg in 1742 and subsequently translated into French and German. It has been suggested that Andrey Grekov did the drawings, while Grigory Kachalov, Ivan Sokolov and their apprentices made the engravings from the drawings for the book.

After Weitbrecht's death in 1747, the Academy of Sciences hired the Dutch medical doctor Abraham Kaau-Boerhaave, who had been on the staff of the St Petersburg Admiralty Hospital. The *Kunst-kamera* was in an extremely difficult situation after the fire of 5 December 1747 damaged both the building and exhibits of the museum. Nevertheless, in 1749 Kaau-Boerhaave reported: 'I made a detailed description of an infant, a monster in the lower part of its body, with the addition of my opinion on how and why such creatures are born, and of drawings created under my supervision'.⁶ In December 1753 it was decided to publish this work on congenital physical deformities. The first part was issued the following year and Ivan Sokolov was simultaneously commissioned to engrave anatomical illustrations on 13 copper plates for the second part.⁷ There is indirect evidence that the drawings were the work of Grekov.

Co-operation between the anatomists, draughtsmen, and engravers of the Academy of Sciences was continuous and fertile during the period under review, which was therefore a period especially conducive to the publication of serious scientific works. Scientific illustration thrived during these 30 years and made a significant contribution to the development of science. The well-trained artists were meticulously able to convey minute details of the anatomy, as well as deviations from the normal development of the foetuses. They were depicting and thus preserving the anatomists' findings, basically acting as co-authors with the scientists.

In 1767, Caspar Friedrich Wolff from Germany took the position of professor at the Academy of Sciences. He was a mature scientist, author of the theory of epigenesis put forward as a counterweight to the idea of pre-formation (development by a simple enlargement, the idea that everything is already defined in the embryo, is predetermined). Wolff continued his embryological research in Russia. In addition he wrote articles about the organs of wild animals (e.g. the lion he dissected), as his predecessors had done. Gradually, however, he concentrated on teratology (the study of the production, development, anatomy and classification of physical deformations). He plan-

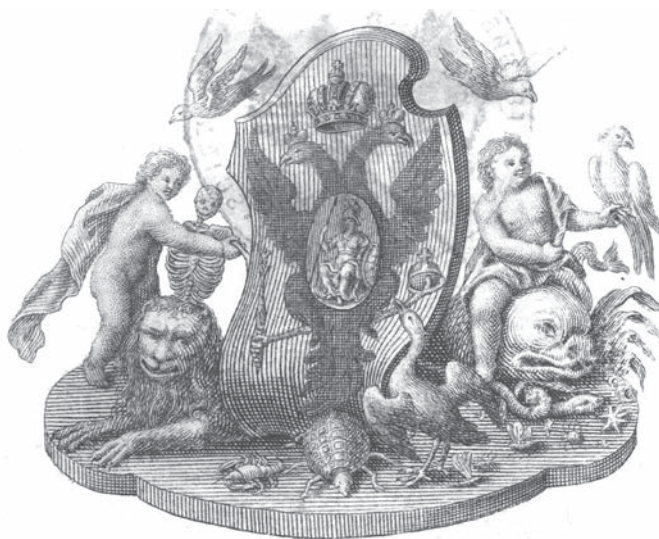
ned a grand treatise on the ‘theory of monsters’ but was never able to finish this work. He did the drawings himself for this work and after his death, the archive acquired 84 sheets of anatomical drawings and 184 pages of descriptions of the most striking ‘monsters’ from the museum of the Academy of Sciences. This work was not published until 1973.⁸ During his 27 working years in Russia, Wolff published a considerable number of articles in *Commentarii novi, Acta, Nova acta* and other publications; some of his drawings were engraved for this purpose.

8. Wolff 1973.

Further research is necessary to establish how far the material just mentioned can be considered to be part of the paper museum, the subject of this publication. As already mentioned, the 22 sheets that have been preserved are but a fraction of the total number that the five anatomy boxes must originally have contained. It would appear, for example, that the *Icones monstrorum* box contained more drawings of Ruysch’s specimens than the two or three mentioned at the beginning of this introduction. An interesting source of information points to this. In 1745 a series of albums were compiled of all the engravings made by the Academy of Sciences to date, each print being included twice as a duplicate record. The literal translation of the title of this series of volumes is, ‘Sheets from the Academy of Sciences printed from plates’. Among these are several depictions of Ruysch’s specimens made in Russia, which are not part of the series of 22 sheets under review. It can be assumed, however, that the drawings from which these prints are derived (and perhaps the other prints mentioned too) were originally part of the ‘paper museum’.

The anatomical drawings in the present series dating from the 1740s to 1760s represent part of the *Kunstkamera*’s teratological collection. Although the term teratology was not introduced until the second half of the 19th century by Isidore Saint-Hilaire – interestingly enough in connection with the collection of deformed foetuses brought together by order of Peter the Great – it is essential when discussing the 18th century. The unique teratological collection formed the basis of the research of the anatomists mentioned here. The drawings from the personal archives of these scientists preserved in the St Petersburg Archives of the Academy of Sciences shed new light on the practice of illustration in the 18th century and bear witness to the importance placed at that time on research on teratology and comparative anatomy.

ICONES MONSTRORUM





0002

0002
Child with a dissected thorax and abdomen, a large birthmark on the head, and a piece of skin removed from the forehead.



0010

0010
Child with anencephaly (absence of the brain).



0011

0011
The living 'monster' Foma (Thomas), who resided in the Kunstkamera. He has a deformity in the upper and lower extremities.



0013

0013
Child with a congenital anomaly in the development of the upper and lower extremities.



0015

0015
Twins joined at the body and with abnormalities in the development of the lower extremities.



0017

0017
Human foetus with serious abnormalities in the development of the body and the extremities. The head and the viscera are missing.



0018

0018
Newly born girl with anomalies in the
extremities and the face.



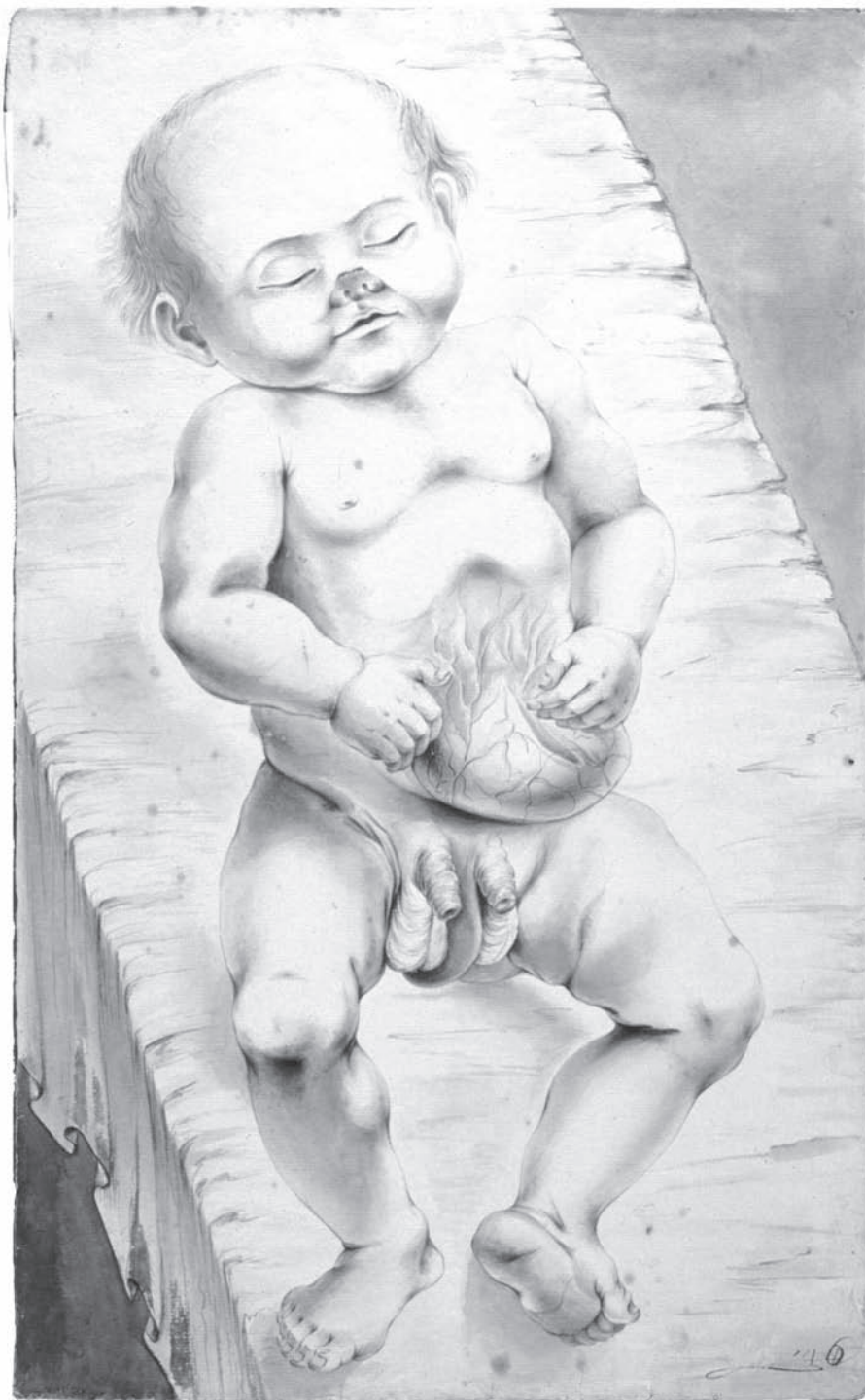
0020

0020
Boy with hypertrichosis, seen from the side.
His body and face are covered with hair.



0022

0022
Twins joined at the body and with an
anomaly in the development of the lower
extremities. The sheet shows sketches of
the (missing) left shin and foot; pencil
sketches of body extremities are also vis-
ible.



0021
Child with a congenital anomaly in the
development of the abdominal wall and
with double reproductive organs, lying on
a couch that is covered with a cloth.

0021

ZOOLOGY

Roald L. Potapov

The 112 sheets we are now familiar with are only a very tiny part of the original collection of zoological drawings in the ‘paper museum’ which amounted to no fewer than 12 boxes. The 1741 catalogue makes mention of two boxes of drawings of quadrupeds, birds, fishes and insects, whereas there were only single boxes of drawings of the amphibians, the snakes and the salamanders. In addition to these there was a box entitled *Icones marinorum* (containing objects like crustaceans and starfish).¹ If we work on the assumption that the boxes were full and we presume that there were ca. 70–100 sheets in a box, then the 112 sheets we are familiar with would amount to about one seventh to one tenth of the original ‘zoology’ corpus. We can only speculate about what happened to the remaining animal drawings.

1. *Musei Imperialis Petropolitani*
(hereafter referred to as MIP)
Vol. II, *pars prima*, St Petersburg
1741, p. 176.

The animals represented

On the sheets that have been preserved there are depictions of about 200 different animals, however the numbers in each group vary a great deal.

Marine invertebrates are represented only by starfish (cat. nos. 75–77 and 79–80), sea urchins (only shells without spines: one sheet with three drawings), and molluscs (only shells, including cone shells, whelks, and bivalves: cat. nos. 81–84). It should be noted that the present section does not include drawings of squids, corals, and crabs, abundant in the Seba collection, which after having been purchased by Peter the Great in 1716 became part of the basic *Kunstkamera* stock.

Further, there are a few marine animals to be found on the lid of one of the jars, the one with a monkey preserved in alcohol (cat. no. 29), which is decorated with a kind of still life depicting whelks and bivalves and a branch of gorgonaria. The same is true of the pot containing a baby crocodile and the one with a half-monkey, which both have a composition of shells on their lids (cat. no. 125 and 31 respectively). These are presumed to be specimens from the Frederik Ruysch collection also purchased by the tsar in Amsterdam, as it was usual for him to decorate his vials in this way. Evidently at the time the drawings were made these objects were still in their original state.

The collection has only eleven drawings of insects, drawn on five sheets, showing among other things orthopterans (locusts and grasshoppers, including wingless ones), a Rhinoceros beetle, and a fly with details that could only have been seen by looking at it through a magnifying glass or by having extraordinarily good eyesight (cat. nos. 131 and 108). The sheet in question will be discussed later on because it mainly features two lizards. Further five spiders are shown in cat. no. 130.

It is remarkable how few insect drawings are to be found here, and in particular how few depict butterflies and bugs, as they were abundant in the Seba part of the *Kunstkamera* collection and in the collection as a whole.

Scorpions are shown in five drawings on one sheet (cat. no. 129). Just like the spiders, several different species are depicted from tropical and temperate zones, rather than variations of one and the same species. One of the scorpions has an extra pair of pincers, which could not have been a natural aberration but must have been a falsification by the taxidermist or a mistake on the part of the draughtsman.²

2. This is the Dutch biologist Aldo Voute's assessment.

Fish are to be seen in only five drawings, four of these are to be found on one sheet (cat. no. 71) showing stuffed specimens: including two cowfishes, and a boxfish. The latter may have come from the Black Sea, whereas the rest are common in tropical waters. Each of the fish is carefully depicted capturing its distinctive appearance.

Amphibians are represented by only 2 specimens (each on a separate sheet: cat.nos. 73-74), they are Surinam toads or Pipas; the females of the species are known to carry roe on their backs in special alveoli. This species is to be found in the tropical areas of the Caribbean (West Indies). Both specimens, that were obtained by the *Kunstkamera* from the Seba collection, are preserved in alcohol, one of these is hanging from its lips. According to the inscriptions on the reverse, the two drawings were executed in 1732 by Andrey Grekov. This makes them the earliest dated *Kunstkamera* drawings known to us.

Reptiles are well represented in the collection's drawings. Almost all of them were made after stuffed specimens executed with a specialized knowledge of their posture, although some of them are out of proportion because the legs are not in the correct stance. The drawings show all the major groups of reptiles available in the *Kunstkamera* collection, except turtles. The reason for this omission has yet to be examined because the collection did have turtles once and they survived the fire of 1747.

The drawings of crocodiles show both stuffed specimens and those preserved in alcohol. All the drawings show baby crocodiles hatching (cat. no. 125), including the one from the Ruysch collection which is to be found in a jar with a shell-decorated lid, as mentioned earlier.

The snake depictions can be divided into two groups, viz. stretched and coiled, represented by different species of both small and longer snakes. Stuffed snake specimens lose their colour in a very short time, but the present drawings accurately convey the various hues, which suggests that at that time taxidermists dyed the specimens. This was only possible with stuffed specimens, not those preserved in alcohol.

In the case of the latter, freshly conserved specimens could be taken from their jars and given the postures the draughtsman wanted; for this reason it is practically impossible to determine whether the drawing was made after a wet or a dry specimen.

Thirty snake drawings (on 20 sheets) have come down to us today, showing a great variety in species. The fact that many sheets contain several specimens suggests that the entire project was based on a certain plan. The same applies to lizard drawings (24 sheets with 48 drawings), characterised by the precision with which they have been depicted, especially the scales and colouring. The specimens depicted represent all the major groups of lizards, viz. geckoes, stump-tailed lizards, agamas, desert monitors, iguanas, chameleons, etc. Although some of the stuffed specimens used as models for drawings still exist in the Zoological Museum of the Academy of Sciences in St Petersburg, they have lost all their colouring. The drawings are therefore useful as they can be used as models when restoring the specimens. The drawings demonstrate the value of recording the colours of freshly preserved specimens. Nowadays one might argue that photography could provide zoological museums with a simpler and less expensive method of recording colour details. But resorting to photography would mean taking a risk, as we do not know whether colour photographs will deteriorate in, say, 250 years, whereas watercolours have definitely withstood the test of time.

Although the *Kunstkamera* was famous for its collection of birds, drawings of this particular group are not numerous – only 17 sheets with 19 drawings showing a variety of species, both stuffed specimens mounted and standing and stuffed specimens lying on their backs, as if they had just been killed. It was the posture typical of birds used for scientific purposes, rather than exhibitions. The present collection has three such carcasses. The other drawings show various stuffed specimens, either standing or mounted. From a taxidermist's point of view, they are not top quality as they all show a lack of expertise in preserving the correct proportions and in accurate feather arrangement. Among the drawings are those of birds acquired by the *Kunstkamera* as a result of expeditions both inside and outside Russia (see cat.nos. 52, 55, 59, 64, 65 and 67).

Among the drawings that have been preserved depictions of complete mammals are the least numerous. There are only six (cat.nos. 43–48), two of them showing the same specimen, namely a flying lemur. A couple of drawings show specimens preserved in alcohol (cat.nos. 29, 31 and 49), the first being a monkey with a fish in its paws, a specimen from the Ruysch collection which we already encountered when

3. Stanyukovich 1958, p. 390.

discussing the marine invertebrates because of the decoration on its lid.³ The rest of the drawings show horns, tusks, and skulls (for instance cat.nos. 23-28). The drawings represent both the materials of the earliest expeditions organised by the Russian Academy of Sciences to Siberia, Kamchatka and the Orient (stuffed specimens: cat. nos. 44 and 46 an ermine and a bat; antlers of a mountain sheep and a capri-corn; tusks of a narwhal and a walrus; a skull of an antelope with antlers) and material belonging to Ruysch's and Seba's collections (the above-mentioned monkey, the skull of a babirusa: cat.no 28). It should be noted that there are only a few drawings of stuffed specimens in the present group, and from a taxidermist's point of view all of these (except the bat) reveal flaws (cf. similar to the faults mentioned above in the section on birds).

Although the sheets just mentioned contain little information concerning the objects depicted, the following mammal is covered in great detail. Four sheets with four drawings are devoted to a narwhal: its tusk or 'horn' as it was called (cat. no. 762), plus three sheets depicting the animal: a sketch (cat. no. 68) and two drawings, one showing the entire body with the tusk (cat. no. 69), the other showing once again the entire animal but with the middle part sketchily drawn in, and, the tusk shown separately (cat. no. 70). The latter is remarkable, because there are a number of inscriptions surrounding the depiction, indicating not only the dimensions of the body and the tusk (dimensions are indicated on the sheets with the antlers of a mountain sheep and an antelope as well), but also the animal's provenance: from the Caspian sea. This is an obvious mistake (the narwhal is endemic to the Polar Ocean basin) which shows the level of scholarship on the fauna of Russia at the time. Further it should be noted that at that time the animal was taken to be a fish, as the placing of its remains in the *Kunst-kamera* shows. For this reason these specific drawings have also been placed with the fishes in the current catalogue, with the exception of cat. no. 762: two sceptres made from narwhal tusks, which belong to the artificialia.

One can only wonder what sort of museum item this narwhal was. Numerous indications of the dimensions of both the entire body and its parts suggest that the drawing was made shortly after the animal died. Unfortunately the drawings are undated, but I am inclined to believe that the narwhal had been caught near Archangel and, whilst still alive delivered to the zoo of St Petersburg, where it died. It is known that anatomising zoo animals and making stuffed specimens or skeletons for exhibition purposes was carried out in the *Kunst-kamera*.⁴

4. Novikov 1957. See also Anna Radzyun in the present publication.

A separate group of drawings is devoted to animals, both wild and domestic, with various abnormalities. Materials of this kind had been collected since the *Kunstkamera*'s early beginnings. The present collection has thirteen sheets with thirteen such drawings showing whelps, piglets, kittens, chicks, and a rat. The majority are newly-born animals with bifurcated bodies from the head downwards (cat. no. 42: a dog or cat) or with two pairs of hind legs, although there are some with eight legs (cat. no. 40: a piglet), as well as double-headed animals (a calf and a kitten). In cat. no. 42 the animal is depicted in a jar; the rest of these drawings show specimens which were actually preserved in alcohol, but the containers are not depicted. Only one drawing was made after a stuffed specimen: a double-headed calf (cat. no. 34). Doubling of heads or extremities, partial body bifurcation, etc. are well known abnormalities of morphogenesis, which in the first half of the 18th century was a central focus of scientific interest (see also Anna Radzyun in this publication).

Modes of representation

In the majority of cases the faithfulness of depiction is surprising. A good example of this would be the reptiles due to the perfect way the drawings were executed, each scale on their body being conveyed with exact precision. In most cases one can determine the species to which each of them belongs (see for instance the snake in cat. no. 94: *Chironius bicarinatus*). Indeed, only some of the drawings (several birds and mammals) show evidence of distortions in the stance or contours of the animals depicted. Even here, however, the artist seems to have conveyed the taxidermists' inaccuracies as faithfully as possible. As is well known, for a long time mammals and birds were the most difficult to stuff; it is no coincidence that the 'correct' versions (i.e. true to nature) were not made until the mid-19th century. One can see this in the exhibits of the Museum of Zoology in St Petersburg, which began to be collected in the eighteenth century. For example in cat. no. 65 a drawing showing a pied flycatcher with folded wings and tail: the artist has faithfully rendered all the wrongly arranged wing-feathers. On the other hand, the reptiles (snakes, lizards, and crocodiles) shown in the drawings, richly represented in the *Kunstkamera* due to the purchase of Albert Seba's famous cabinet by Peter the Great, were done flawlessly despite the somewhat unnatural stances adopted i.e. legs fully extended, instead of with their bellies touching the ground – as is typical of lizards. Similar lizards have been preserved in the Museum of Zoology since very early times.

It is possible that some of the drawings were made after earlier, erroneous illustrations – leading to erroneous reproductions. In the copying process the artist might well add to his predecessor's flaws. After all copying existing depictions was an age-old tradition. A readily available source, particularly for the drawings of reptiles and mammals, might very well have been Albert Seba's famous catalogue, but up until now a clear resemblance has only been detected in a few drawings: the flying lemur from cat. no. 47 (see Natalya Kopaneva in this volume). We should however bear in mind that this apparent similarity could have been caused by the objects themselves, which were the same in both cases. If we actually look at the way in which the material is expressed then we can see great differences between our drawings and Seba's engravings which can only partly be explained by the differences in technique, for example the way snakes' and lizards' scales have been represented: the *Kunstkamera* draughtsmen have rendered these very accurately over the entire body of each lizard or snake, whereas in Seba's engravings the scales are only depicted fairly accurately on the extremities, belly and head, the rest of the body showing a grid of horizontal and oblique lines.

It is not likely that the artists used living animals, for conveying each scale of a snake or lizard, or each feather of a bird required the object depicted to be motionless and well-lit. As we have already seen, a number of drawings are after items preserved in alcohol (for example cat.nos. 29, 73 and 125); others show stuffed carcasses lying on their backs, in a position normally used for the purpose of study (cf. birds: cat. no. 67; mammals: cat. no. 43), stuffed lizards with their paws erroneously upright instead of with their bellies on the ground (cat.nos. 107), dried insects with open wings (cat. no. 131), or parts of animals, e.g. skulls (cat. no. 28), fragments of horned skulls, horns, or parts of tusks (cat.nos. 23). Interestingly, cat. no. 28 shows the skull of babirussa, also illustrated in Seba's catalogue.⁵ The drawing has as commentary, 'true length'. Indeed, the skull is depicted in life size, although the point of view differs from that in Seba's catalogue. Only the drawings of the narwhal mentioned earlier in cat.nos. 68-70 had undoubtedly been done after a dead animal, before stuffing began.

There is no reason to believe that any of the drawings were made during an expedition. Although one of the artists who created the present collection, Johann Christian Berckhan, did take part in Vitus Bering's expedition to Kamchatka, there are clear differences between these and the drawings he made during his travels. The expedition drawings were of animals that had died a short time before which he drew carefully but somewhat hastily, whereas his *Kunstkamera*

5. Albertus Seba, *Locupletissimi rerum naturalium Thesauri*, vol. 1, Amsterdam 1734, tab. L, no. 3.

drawings make a somewhat ‘neater’ impression. A further difference is that his expedition drawings of recently caught animals have inscriptions on the reverse, either below or above the drawing.⁶ Besides, these drawings have been preserved separately (probably since the 18th century) in the Archives of the Russian Academy of Sciences,⁷ thus they have not been included in the boxes of the ‘paper museum’.

Date and signature

Of the one hundred and twelve sheets only thirty-five are dated. Working on the basis of the few dates known, the drawings are thought to have been produced, tentatively, between 1732 and 1753. It should be noted that only two dated drawings are from 1732, the rest of them were produced between 1749 and 1753, that is after the 1747 fire in the *Kunstkamera*.

Fifty-five drawings have the draughtsman’s signature. As already stated above, the earliest dated drawings were made by Andrey Grekov: two drawings of the pipa toad, both intended for engraving and dated 1732; with the artist’s remark, ‘done from [after] nature’.

But the largest number of signed drawings come from the hand of Johann Christian Berckhan and Maxim Rykov, who have respectively 22 and 23 sheets to their names. Berckhan’s are undated, but he is known to have had a permanent position as a *Kunstkamera* artist in the 1740s–50s, i.e. after he had returned from Bering’s second expedition to Kamchatka (1733–43).⁸ Berckhan’s drawings show mainly snakes and lizards, all made after stuffed specimens, except the frilled lizard in a jar, still in the Zoology Museum’s collection. Further there are three baby crocodiles, one made after a stuffed specimen, and two after specimens preserved in alcohol; and an antler of a mountain sheep.

Unlike Berckhan, Maxim Rykov almost always dated his work. The standard inscription reads, ‘Drawn by Maxim Rykov, year, month, day’. The drawings show the deformed part of a lamb, a bat, a rodent, a rat, an antelope’s horned skull, a baby monkey (from the Ruysch collection), lizards (15), snakes (13), a baby crocodile, and a fly, dating mainly from the years 1749–1750. As an apprentice, Rykov is known to have taken part in the restoration of the *Kunstkamera* after the fire of 1747; he was responsible for painting the figures on the corbels supporting the cabinets with exhibits.⁹

Then there are two more, Nikita Bolotov (two drawings, showing a crocodile and a lizard, dated 1752; and 1753) and Efim Terentyev (two undated drawings showing 2 narwhal’s tusks, and an object similar

6. See Exh. cat. Halle 1996, pp. 220, 225–227, 282.

7. St Petersburg Archives of the Russian Academy of Sciences (SPBARAN), f. 1, op. 105.

8. Stetskevich 1997.

9. Stanyukovich 1964.

to a sponge). In addition to these two we come across three unclear names: Naum... (the last name is illegible and has still not been identified): one sheet with two snakes, dated by the author to 22 June 1750 and inscribed above 'the 3rd day of the initials E.E, as a signature on the reverse of cat. no. 67, undated, showing the carcass of a whinchat have still not been identified, the same is true for the designation Gi. G. on the reverse of cat. no. 51, undated, probably showing a paradise kingfisher on its back.

Functions past and present

One may wonder whether the drawings in question were intended for some sort of publication, such as a catalogue or a zoological treatise. But the 1776 *Kunstkamera* catalogue¹⁰ did not contain drawings of animals, and the first book on zoology published by the St Petersburg Academy of Sciences did not appear until half a century later.¹¹ To what extent our drawings were intended, and actually used, for engravings has yet to be studied further (see Kopaneva in this volume). There are a few, viz. the two drawings of a toad (Pipa: cat.nos. 73-74), and the drawing of an ermine (cat. no. 44), which show the type of framing typical of a print.

The drawings of lizards and snakes, which are numerous and show a great deal of variety create the impression that some sort of project was underway aimed at recording the entire zoological collection. Judging by the dates, the drawings were made during a short period of time (1740s-50s), which would also seem to indicate a certain degree of planning. Besides, only three artists were involved: mainly Rykov and Berckhan, and Bolotov. The final goals of their work however are not known: perhaps the reptile drawings were destined for engravings too, but up until now no concrete evidence of this has been found. As far as the other animals are concerned one might almost conclude that they had been chosen at random. It is more likely though that a considerable number of the drawings has been lost – either during the fire of 1747 or due to the bad conditions under which they were kept, or both. This may be confirmed, indirectly at least, by the absence of drawings belonging to such significant categories of the *Kunstkamera* zoological collection like butterflies and turtles.

Many other details of this project remain unclear, for, although an excellent catalogue of the zoological collection of the *Kunstkamera* was made five years before the fire,¹² no inventory of the extant objects was made after it. Therefore the drawings produced in 1749-53 are the only source of knowledge concerning the objects that survived

10. Bacmeister 1776.

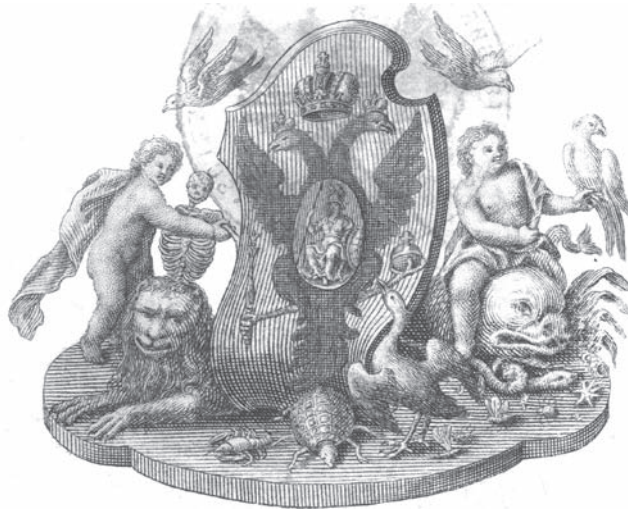
11. P.S. Pallas, *Zoographia Rosso-Asiatica*, St Petersburg 1811.

12. MIP Vol. I, *pars prima*, St Petersburg 1742.

the fire. For the present-day researcher that opens the door to several lines of enquiry. The *Kunstkamera* collection of zoological drawings may be a help in establishing the type series or lectotypes used, but not specified by Carolus Linnaeus, the originator of the modern binary system of taxonomic classification. Indeed, Linnaeus was acquainted with items in Seba's collection as he refers to them.¹³ Since many of the depicted objects come from that collection, the drawings may help not only in finding the lectotypes described by Linnaeus among the *Kunstkamera* objects, but also in establishing the original colouring of these objects. In this context, the significance of the colour drawings cannot be overestimated.

13. Yur'yev 1981.

ICONES QUADRUPEDUM,
AVIUM, PISCIVM,
AMPHIBIORUM, MARINORUM,
SERPENTUM, LACERTORUM
ET INSECTORUM





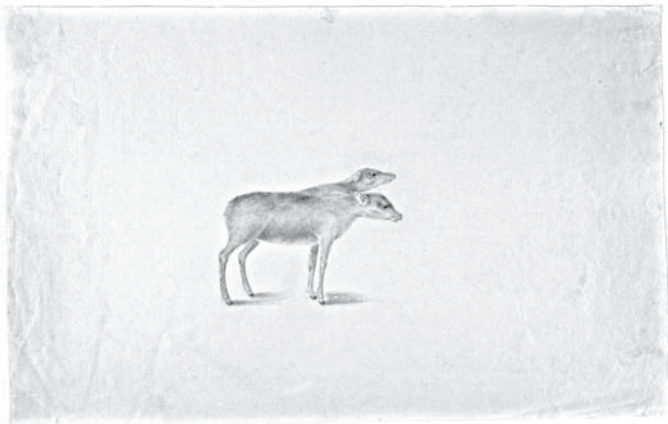
0029

0029
Small monkey with big eyes, in a jar
(preserved in alcohol), holding a fish in its
paws. The jar has a lid with a green rim
and is decorated with shells and coral.



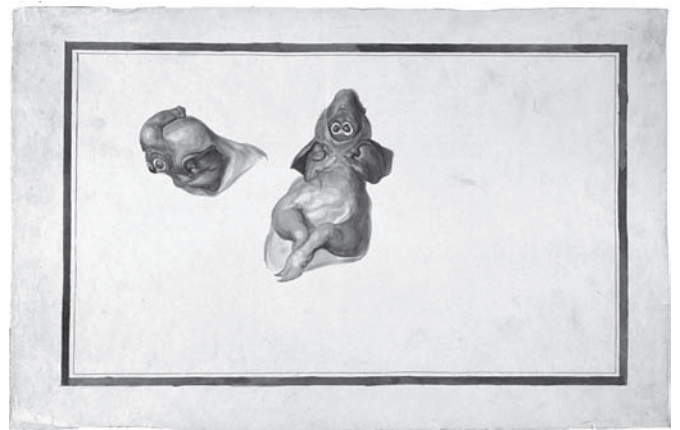
0031

0031
Half-ape in a jar with a green cover
(preserved in alcohol), seated, with a nut
in its front paws. The jar has a lid with a
green rim and is decorated with a shell.



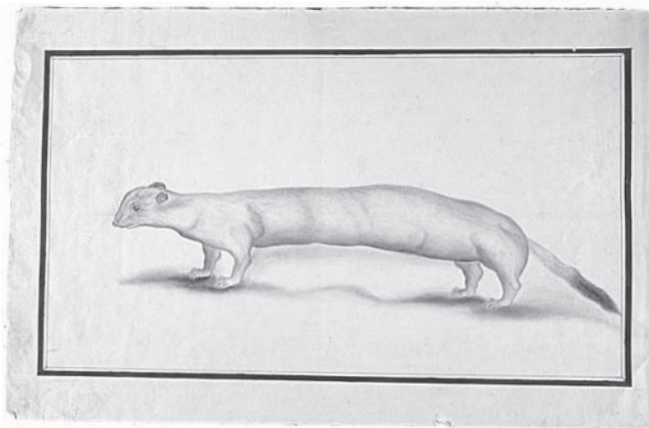
0034

0034
Double-headed deer calf.



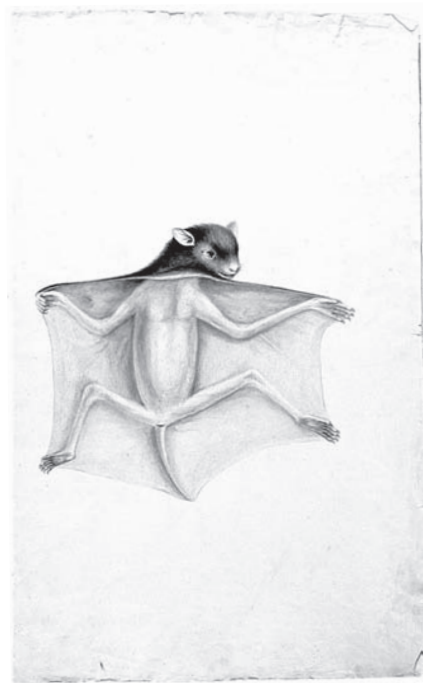
0039

0039
Head of a monstrous piglet (in profile and full-face). The profile shows two closely set eyes and a trunk-like skin excrescence on the forehead (proboscis). The eyes are below the ears. The full-face depiction also shows the upper extremities with cloven hooves.



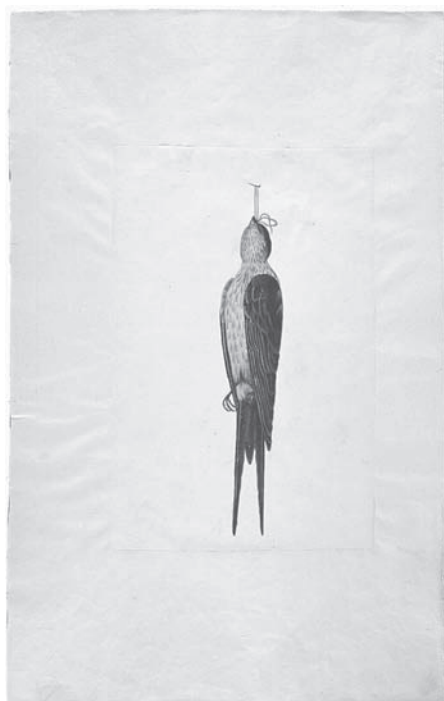
0044

0044
Ermine, *Mustella erminea* (stuffed specimen), stretched considerably.



0047

0047
Flying lemur or colugo, *Cynocephalus variegatus* (stuffed specimen), seen from below with a spread gliding membrane. The head is brown-grey, the body brownish-yellow and the inner surface of the ears whitish.



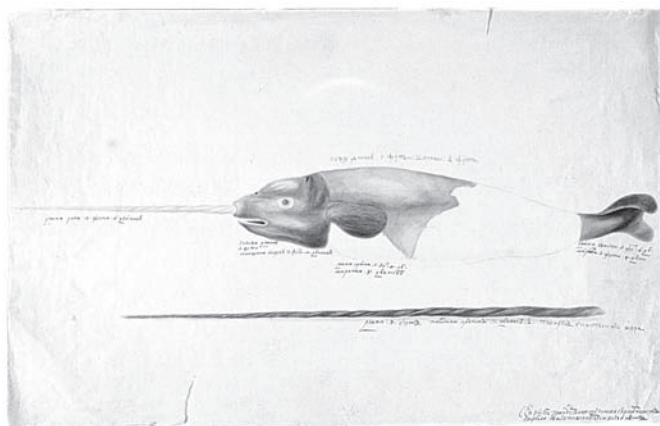
0034



0052

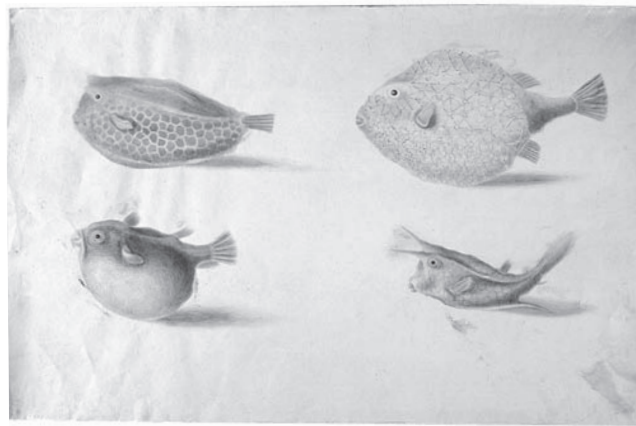
0052
Red-rumped swallow, *Hirundo daurica*
(stuffed specimen), hanging on a nail with
its belly turned towards the viewer.

0059
Honeyeater (?), *Meliphagidae sp.* (stuffed
specimen, mounted), brown upper part,
with a dark-blue spot on the elbow; it has
a big, curved bill.



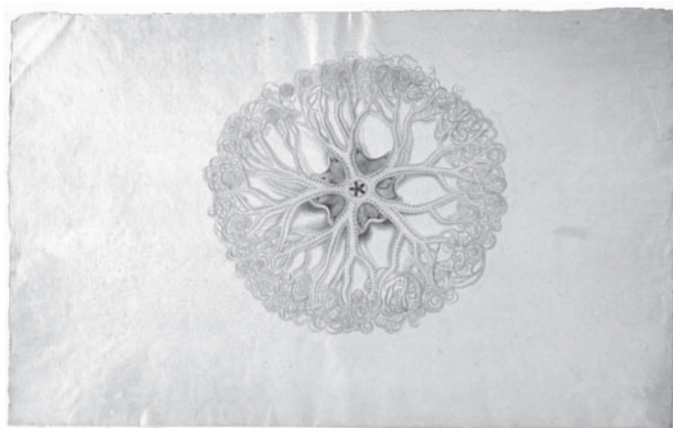
0070

0070
Narwhal, *Monodon monoceros*. The animal is only partially depicted (tusk, head, front fins, back and tail) and has a brown colour and a white tusk. The tusk is also depicted separately.



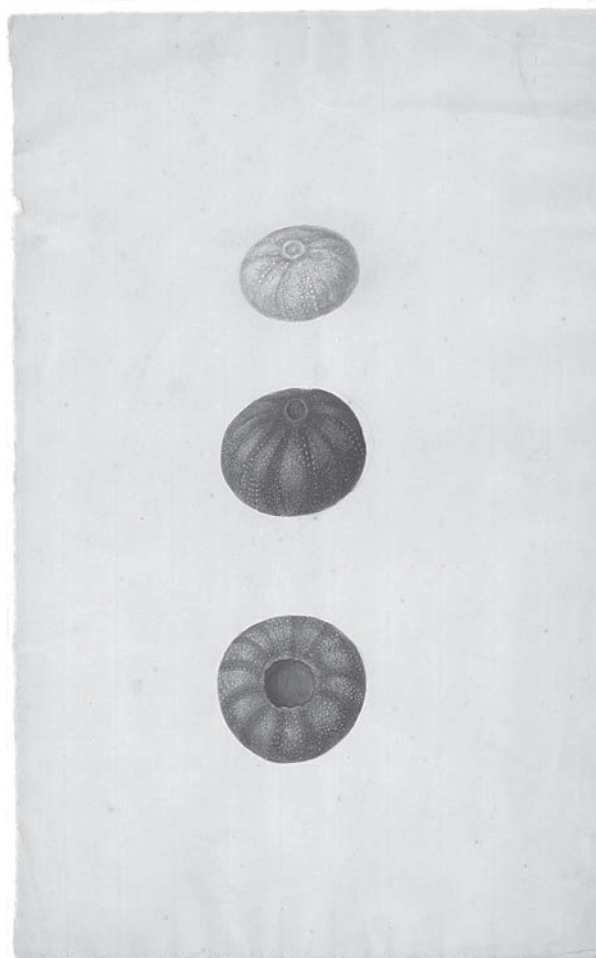
0071

0071
Four fishes, *Ostraciidae*, (dried specimens). Above left: a brownish fat-bellied cowfish, *Lactoria* cf. *diaphana* (?) Above right: a yellowish-brown fat-bellied boxfish, *Anoplocapros* cf. *inermis* (?) Below left: a brown fat-bellied fish with a beak-like mouth, *Sphoeroides* sp. (?) Below right: a brownish long-horned cowfish, *Lactoria cornuta*.



0075

0075
Light-brown starfish,
Gorgonocephalus sp.



0078

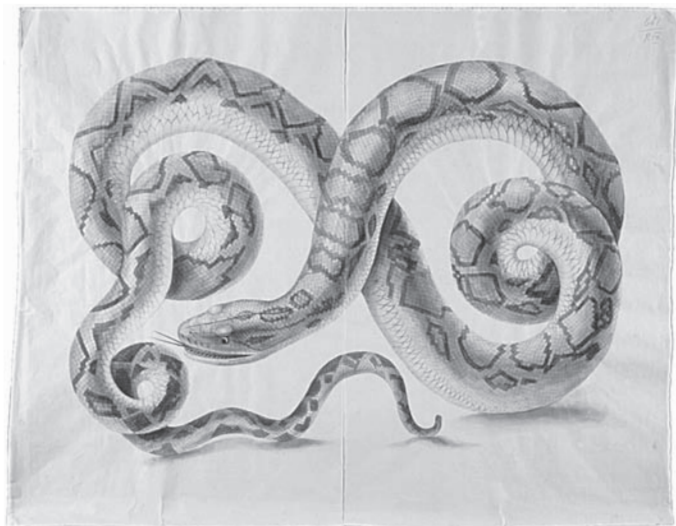
0078
Three sea-urchins, *Echinoidea*. Above:
a yellowish sea-urchin. Centre: a lilac
sea-urchin. Below: a lilac sea-urchin seen
from below (probably the same as the one
in the centre).



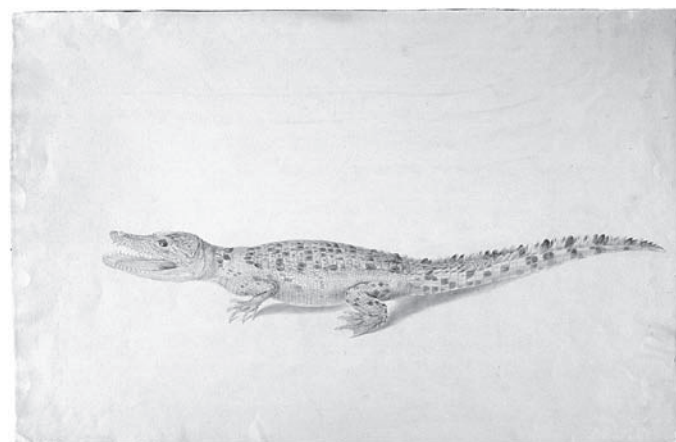
0096

Three snakes (stuffed specimens or preserved in alcohol). Above: a short snake, *Vipera russelli* (?), greyish with a pattern of blackish spots and wavy lines. The eyes are close to the mouth. Centre: a short thick snake, *Homalopsis buccata*, with wide brown stripes against a white background and large scutella on the head. Below: a thin black and white snake with a dark head, with narrow white stripes against a dark background and black wavy lines against the lighter background.

0096



0101



0113

0101
Snake, *Python reticulatus*.

0113
Small crocodile (stuffed specimen), sand-brown with a crest of triangular scutellas along the tail.



0115

0115
Three lizards (stuffed specimens). Above: a sand-coloured lizard, *Uranoscodon superciliosa*, with an unclear brownish pattern along the backside of the body. Centre: a bluish-black lizard with a light tail. Below: a grey-blue lizard with red eyes and a raised head.



0125

0125
Baby crocodile, *Caiman crocodilus* (?), in a jar (preserved in alcohol). The crocodile is coming out of the egg, with closed eyes. The jar has a green lid, decorated with shells.



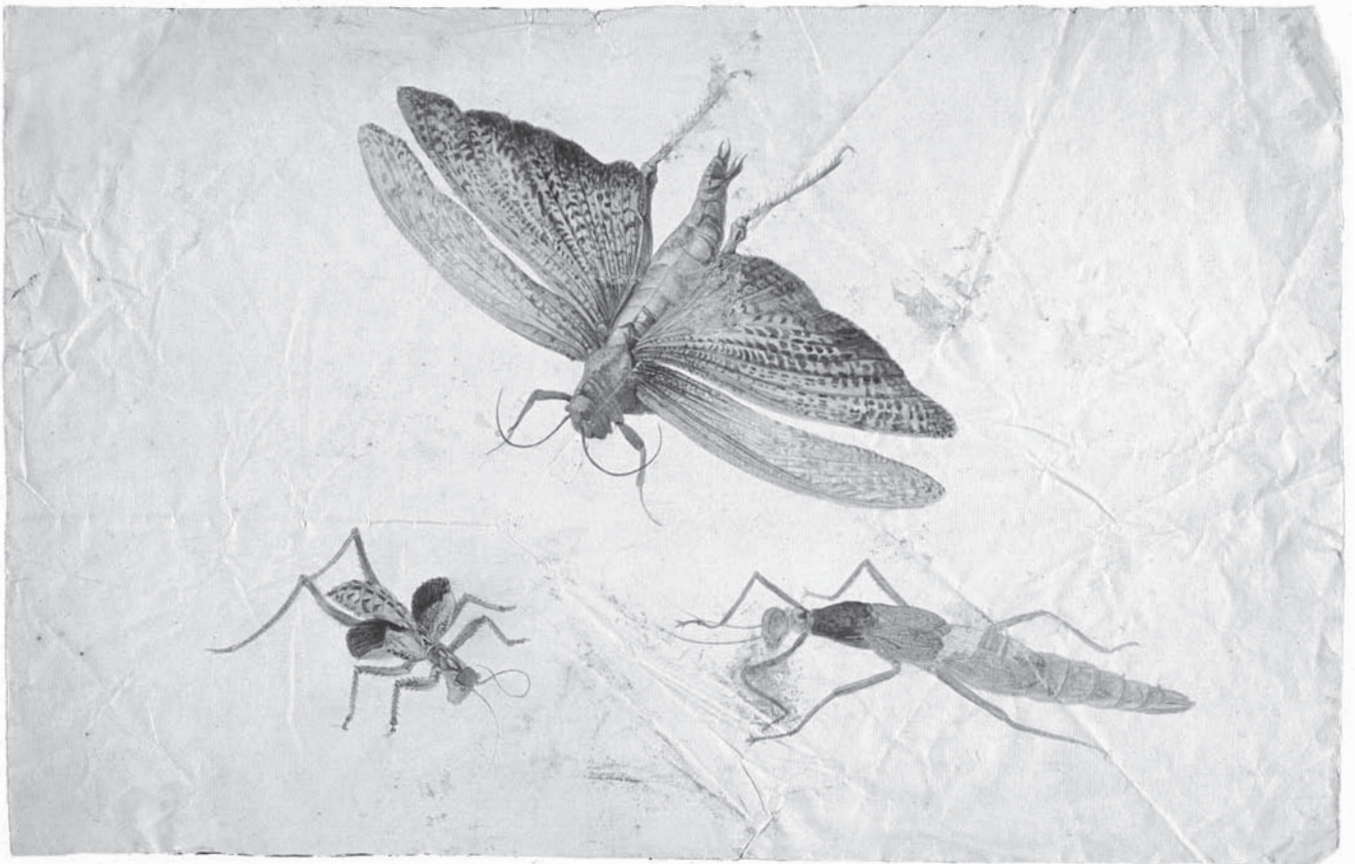
0128

0128
Large baby crocodile, *Caiman crocodilus*, in a jar (preserved in alcohol). The jar has a lid with a red decorated rim.



0131

0131
Rhinoceros beetle, *Scarabaeidae*, *Magasoma actaeon* L.



0133

0133

Three grasshoppers, *Orthoptera*. Above:
a brownish grasshopper with open wings,
Tropidacris sp. Below: two unidentifiable
brownish grasshoppers.

BOTANY

Andrey K. Sytin

According to the table of contents in the catalogue *Musei Imperialis Petropolitani Vol. I-II* (MIP) of 1741-1745 eleven of the eighty-five boxes belonging to the 'paper museum' contain drawings of plants. These only seem to correspond with a small number of dried plants kept in the *Kunstkamera*. Most of the eleven boxes, nine to be exact, contained drawings of plants originating from the Cape of Good Hope in South Africa. The MIP has no record of plants from this part of the world. At present it is unclear how these drawings ended up in St Petersburg (see Introduction). The sheets of drawings that will be discussed in this article were most probably part of the collection kept in boxes V, VI and X (MIP nos. 24, 25 and 29). According to the description in the MIP, copies of plant drawings that were published in one of the first illustrated scientific publications of the Academy of Sciences, the *Plantarum minus cognitarum centuria I(-v) complectens plantas circa Byzantium & in Oriente observatas* (St Petersburg 1728-1740) by Johann Christian Buxbaum, were kept in the final box.¹

The botanist and explorer Johann Christian Buxbaum was the first botanist to become a member of the St Petersburg Academy of Sciences in 1726.² He came from Merseburg (Saxony) and had been educated at the Universities of Leipzig, Wittenberg and Jena, as well as the renowned University of Leiden, although he never received a doctor's degree in medicine. He had a certain affinity towards plants, therefore his progress in botany was much more marked than in medicine. Under the guidance of the botanist Heinrich Bernhard Ruppius (1688-1719), he published his *Enumeratio plantarum accuratior in agro Hallensi locisque vicinis crescentium* (Halle, 1721). This book met with the approval of the experts. Therefore, when Peter the Great asked the German doctor Friedrich Hoffmann, personal physician to the Prussian king Friedrich Wilhelm I, to recommend a botanist to study the flora of Russia, he recommended Buxbaum. In that very same year (1721), Buxbaum, then aged 28, arrived in St Petersburg on the invitation of the College of Medicine and took part in the organisation of the botanical garden established in 1714 *Aptekarsky Ostrov* (Apothecary's Island). Besides this, he gave lectures on botany to medical students and collected plants in the vicinity of the city. In 1724, as a doctor and scientist, Buxbaum took part in the Russian embassy to Constantinople, headed by Count Alexander Rumyantsev. According to the instructions of the president of the Academy of Sciences, Laurentius Blumentrost he was to carry out research into the 'three realms of nature' (namely: mineralogy, zoology and botany), focusing on medicinal plants. It should be noted that in these instructions the third clause read, 'and to have every item depicted'.³ To meet this

1. Of the eleven boxes only one has been preserved, namely box VII (no. 26). The contents of this box have not yet been identified. In the Archives of the Academy of Sciences a large group of drawings are to be found made during the Second Kamchatka expedition (1733-1744), including a number of drawings of plants. It is unclear whether these drawings were part of the contents of the 58 boxes belonging to the 'paper museum'. Therefore these drawings have not been included in this publication.

2. Pekarsky 1870-1873, vol. 1, pp. 234-246; Danzig 1965, pp. 59-61; Danzig 1973, pp. 55-56, 96.

3. *Materialy* 1885-1900, vol. 1, p. 55.

requirement two draughtsmen accompanied the expedition, the artist Johann Christian Mattarnovy and his assistant. Buxbaum could continue to build on the work strategy and methods for collecting and recording detailed information established by his predecessor, Daniel Gottlieb Messerschmidt (1685-1735), who a few years earlier had been commissioned by tsar Peter to undertake an expedition to West and Central Siberia. His work was to greatly influence botanical research in Russia right up to the late eighteenth century.

Daniel Gottlieb Messerschmidt was born in Danzig. He was educated at the Universities of Jena and Halle. In 1717, Peter the Great invited him to Russia (in the same year the Russian tsar purchased the well-known watercolours by Maria Sibylla Merian in Amsterdam). Messerschmidt was the first explorer of Siberian geography and nature. During his travels, which lasted from 1719 to 1727, he made surprising discoveries ranging over a broad field of interest, from the remnants of a mammoth (one of the earliest *Kunstkamera* exhibits), to inscriptions and the archaeological remains of the ancient inhabitants of the Upper Enisei area.

The natural history collections that he brought to St Petersburg were of outstanding quality.⁴ As early as in August 1721, the librarian Johann Daniel Schumacher gave a demonstration of the descriptions and depictions of birds from the Caspian Sea area, which Messerschmidt had sent to St Petersburg, at a session arranged at the Academy of Science in Paris. The French scientists' reaction was enthusiastic; they suggested that 'natural history objects from all the Russian provinces should be described in detail and the most important ones be depicted in colour'.⁵

In March 1720, Messerschmidt requested that 'two assistants be seconded to him' by the commandant of Tobolsk, the place he had reached a year earlier in December: 'one skilled in pharmacy, and the other capable of drawing'.⁶ Such men were to be found among the Swedish prisoners of war, connected with the school that the pietist Curt Friedrich von Wreechs had established in Tobolsk.⁷ One of them must have depicted the three kinds of orchids belonging to the lady slipper (*Cypripedium*) genus. Those were the earliest Russian scientific depictions of plants. These drawings are characterised by the perfection of their execution and attention to detail, like the corolla and the fruit, which are indispensable for the identification of plants.⁸ It should be noted that the draughtsman depicted the details of the sprout and rootstock morphology, which artists rarely paid attention to, but which are of special significance to botanists.⁹

Johann Christian Buxbaum arrived in Constantinople on 26 Octo-

4. Novlianskaya 1970; Sokolov and Parnes 1993, pp. 54-68.

5. Pekarsky 1862, vol. 1, pp. 535-536.

6. *Ibid.*, p. 352.

7. See Exh. cat. Halle 1996, p. 65.

8. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f. 98, op. 1, no. 20, 38-39 ('Messerschmidt D. G. Anno 1720. Specimen Historia Naturalis. IV Rapport').

9. Later on, depictions of some of the plant species discovered by Messerschmidt or, rather, engravings after non-extant drawings or, probably, herbarium specimens were published by Johann Amman, *Stirpium rariorum in imperio Rutheno sponte provenientium*, St Petersburg 1739, and Johann Gmelin, *Flora Sibirica Sive historia planterum Sibiriae*, vols. 1-4, St Petersburg 1747-1769 (1178 species).

ber 1724, as a member of the earlier-mentioned mission. Buxbaum described the journey in his letters to Laurentius Blumentrost, President of the Academy of Sciences at that time. On 15 July 1725 he wrote that he had found a considerable number of unknown plants in the vicinity of Constantinople, Pere, Belgrade, and (the majority) in Büükdere, where the Russian ambassador had summer residence. Buxbaum also visited the Princess Islands (Kyzyl Adabar) in the Sea of Marmara and the town of Brussa (Bursa). He wrote to St Petersburg that he had climbed Mount Olympus (Moesia or Bythinia Olympus, the Greek name of the Uludag or Keshidag ridge, 2493 m, in Western Anatolia), ‘the highest in this area, always covered by snow which is brought daily to Constantinople to make cold drinks’.¹⁰ Here, Buxbaum collected the major share of the rare plants. His reports were published in the transactions of the Academy of Sciences, *Commentarii Academiæ Scientiarum Petropolitanæ*. He expanded the programme of research to include fossil specimens, sea invertebrates, fishes, and even mosses, although these were not used in pharmacology. Besides these, he discovered archaeological, ethnographical and numismatic objects of considerable value. From Constantinople Buxbaum continued his expedition, via Asia Minor, along the south shore of the Black Sea to Armenia and Georgia (at the time, much of Transcaucasia belonged to Persia). When travelling through Shemakha, by way of Baku and Derbent, he encountered considerable difficulties and sustained several losses, he arrived in Astrakhan, whence, in 1727, he returned to St Petersburg. There, without a break, he started processing the expedition materials, combining this with new field work. As early as 1727, he went to Narva, Reval (now Tallinn) ‘as well as all the regions of Lifland in search of herbs’.¹¹ According to the report sent to the Academy of Sciences, dated 27 August 1727, ‘Johann Christian Buxbaum, professor of botany, has submitted to the Academy of Sciences the first *Centuria*, or one hundred plants belonging to new species, which he collected during his journey to Turkey; the rest of these are being systematised. He has also started the natural history of Prussia, Livonia and Ingria, especially the part relating to herbs.’¹²

The sheets of drawings in the present publication are the ones on which Buxbaum’s *Centuriæ* engravings are based.¹³ Two groups can be distinguished, namely the drawings made on the spot, and copies produced either during the expedition or later on, in St Petersburg, to serve as models for the engravers. The first group has been done in watercolour, on paper without watermarks, with pencil contours. Some of these drawings are only partly illuminated, but the majority

10. Pekarsky 1870-1873, vol. 1, p. 239.

11. *Materialy* 1885-1900, vol. 1, p. 266.

12. *Ibid.*, p. 282. Pekarsky 1865, p. 10. According to the publisher P.P. Pekarsky, the word ‘genus’ (*vid*) as a scientific term was used in Russian publications as early as the first half of the eighteenth century.

13. SPBARAN, f. 1, op. 19, no. 4.

are finished works. Plants are depicted either full-size or as a fragment of a blossoming and a fruit-bearing sprout, or, rarer (as in the case of orchids), with the subterranean parts. In some cases, fragments of the flower or fruit, which are conducive to plant identification, are also shown. Shades of the objects depicted are shown as patches of colour with pearly hues, as if reflecting the blue of the oriental sky. Generally, the depictions are picturesque and realistic. Some of the depictions, e.g. mosses, are more like drawings of dried plants than pictures of the real thing.

The second group consists of copies after the original drawings. They have been drawn the same size as the originals, but they are less botanically informative, because some of the important details have been left out. For instance, in the watercolour drawing showing *Orobis sylvaticus, foliis circa caulem auriculatis* [*Orobis laxiflorus* Desf.] (cat. no 168), one can easily discern a small prickle at the end of the leaf axis, typical of the peavine (*Orobis* L., *Fabaceae*) genus. Besides this, the drawing shows clearly the dispersed pubescence of the calyx, also typical of this species. In the other depiction of the same plant (cat. no 169), these two features are missing. The print in the *Centuriæ* does show the prickle, but not the pubescence. From this example it can be deduced that no. 261 should be regarded as the original, while no. 262 is only an inferior copy. It is of great importance that these botanical observations be taken into account in the identification of the drawings, alongside of those by art historians, who are concerned with style, technique, paint analysis, etc., or historians who deal with handwriting and watermarks. In my opinion, the absence of watermarks and the shade from the object depicted, as well as the use of watercolour are typical of the entire corpus of original depictions of plants in the Buxbaum collection.

As a rule the drawings from the second group, the copies, which were meant for the engravers, show evidence of a mixed technique, probably using tempera and other materials, in addition to watercolour. They are usually on paper with watermarks. Only four drawings have been made on parchment. These four may have been made by Maria Dorothea Gsell (Maria Sibylla Merian's daughter), who was involved in the publication of the *Centuriæ* and who was used to drawing on parchment.¹⁴ Further research should reveal the author of the original drawings made during Buxbaum's journey. No signed drawings have been preserved from Johann Christian Mattarnov's hand, who was a member of Buxbaum's expedition. It seems quite possible that he might have made several drawings from the first group. The engravings of the *Centuriæ* are by Georg Johann

14. Kaminskaya 2000. See also the Introduction and the article by N. Kopaneva in this book.

Unverzagt, as well as by the outstanding engravers Alexey Zubov and G.A. Kaiser.¹⁵

The importance the Academy of Sciences attached to botanical drawings can be seen in the following example, which derives from a report by the committee set up in 1727 for the inspection of Messerschmidt's expedition materials. As a member of this committee, Buxbaum was trying to locate the originals of his botanical drawings, cf. 'Botanist Buxbaum has looked at the inscriptions on the wrappers of the Siberian seeds in the box of the said doctor [Messerschmidt] in order to find the whereabouts of the depictions of these plants, but the engraver Unverzagt said that he had made copies of many of Messerschmidt's depictions of the plants and curiosities he was looking for. From this, it follows that he, the doctor, must still have had some of the depictions of plants in his possession. Therefore the Medical Office has ordered the said doctor Messerschmidt to submit the aforementioned originals to the Academy, since these depictions of plants are indispensable.'¹⁶

Before Linnæus, botanists preferred depictions and descriptions to herbarium specimens. Buxbaum himself is a good example of this. He had travelled parts of the same route taken by the French doctor and botanist Joseph Pitton de Tournefort (1656-1708) and he used his *Corollarium institutionum rei herbariæ* (1719). At that moment he was unaware of the illustrations by Claude Aubriet, the draughtsman who had accompanied Tournefort in his Levantine journey, as they had not been published. Thus he was able to declare boastfully, 'I have eleven new genera and 225 new species; and I have presented them in such a way that now they are more valuable to me than Tournefort's 1500 plants which I only know by their names.'¹⁷ According to Buxbaum, depictions are more informative than descriptions, therefore his descriptions are terse. It was Carolus Linnæus who realized that both are deficient; according to him, it is herbarium specimens that are indispensable in taxonomy. Although in his works, Linnæus repeatedly quoted Buxbaum (there are fifty-eight references in *Species plantarum* alone), he found some of the depictions in his *Centuriæ* unreliable. For further clarification, he wrote to his St Petersburg correspondent who was a pupil of his, the Swedish botanist and explorer professor Johann Peter Falk (1727-1774), who made a thorough search for Buxbaum's dried specimens. On 12 January 1768, Falk answered Linnæus, 'At last, I know for certain that Buxbaum's herbarium is not here. As professor Pallas [i.e. Peter Simon Pallas (1741-1811)] told me, it must be in Berlin. Therefore it will be best if you ask Gleditsch what kind of plant *Cist. affinis* is.'¹⁸

15. Alekseeva *et al.* 1985, p. 14.

16. *Materialy* 1885-1900, vol. 1, p. 375. In September 1727 Messerschmidt had to hand over his complete set of expedition materials to the Academy, on the orders of Laurentius Blumentrost. He returned to Danzig in 1729. See Exh. cat. Halle 1996, p. 69. Drawings of birds and other items from his exhibition are kept in the St Petersburg Archives of the Russian Academy of Sciences. See the contribution of Natalya Kopaneva to this volume.

17. Pekarsky 1870-1873, vol. 1, p. 241.

18. Lipsky 1913, p. 189. The depiction of the plant that Buxbaum called *Cistus* is in fact *Reaumuria cistoides* Adams.

This reflects one tendency in Linnæan botany, namely, its reliance on herbarium collections in preference to depictions of plants.

Buxbaum was a talented taxonomist, capable of discerning features typical of a particular taxon. For example, he was the first to establish the isolated position of the moss he saw near Astrakhan in the classification of mosses (*Bryophyta*). He ascribed it to the genus *Buxbaumia*, thus perpetuating his family name. In 1801, the generic term was institutionalised by the renowned biologist Johannes Hedwig. Several taxons of a higher order bear his name too, e.g. *Buxbaumiales* (order) and *Buxbaumiaceæ* (family), as well as species, such as *Carex buxbaumii* Wahlenb. (a kind of sedge). Few botanists can boast such an honour. The group of drawings of plants that Buxbaum collected on his journey to Constantinople and Asia Minor is an important source for a better understanding of his work.

ICONES PLANTARUM





0168

0168
Upper part of a flowering *Lathyrus laxiflorus* (Desf.) with a corolla with a lilac-violet flag and light blue wings and a bean.



0169

0169
Upper part of a flowering plant almost identical to no. 168, although some features necessary for identification are absent, viz. the subulate appendage of the leaf axis and the hairs that cover the flower calyx.



0183

0183
Vegetative *Pseudosophora alopecuroides*. Below the depiction: a moniliform winged bean, a seed, and details of a dehiscent fruit.



0232

0232
Upper part of a flowering plant of the *Polygala* family with purple bracts and flowers. See no. 324.



0268

0268
Flowering plant of the *Verbascum* family with yellow flowers.



0277

0277
Flowering plant of the *Linaria* family with a yellow corolla. To the left: flower with a spur and a mottled base.



0310

0310
Centre: upper part of a flowering *Ferulago confusa*. Left: a leaf. Right: fruits.



0333

0333
Fruit body of a fungus with a laminate hymenophore and a black velvet pubescence of the pileus, on a piece of a silver fir.



0339

0339
Thallus of a *Gracillaria verrucosa*.



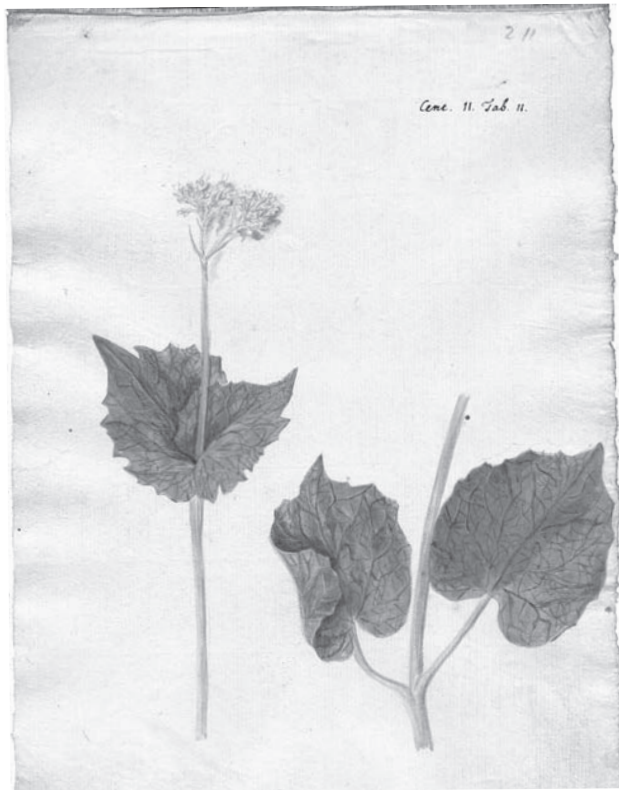
0356

0356
Green cormophyte *Aulacomnium palustre* without a moss capsules.



0375

0375
Alga thalli and sea organisms.



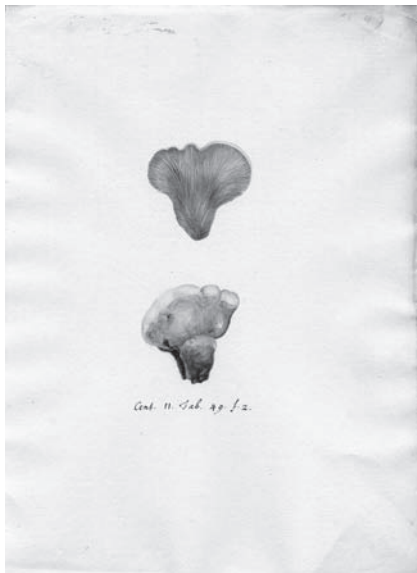
0398

0398
Left: the upper part of a flowering *Valeriana alliariaefolia* with light pink flowers.
Right: the foliated middle part of the plant.



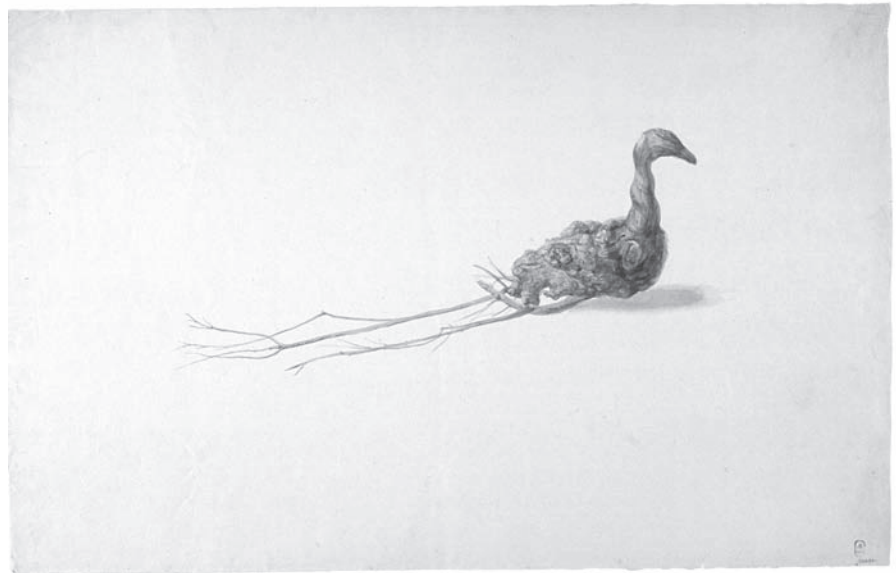
0413

0413
Flowering and fruit-bearing *Euphorbia tuberosa* L. with a tuber, and a detail of an inflorescence. Below: an ovary and fruit separately.



0457

0457
Fruit bodies of fungi.



0496

0496
Tree root shaped like a pheasant.

INSTRUMENTS AND SCIENTIFIC APPARATUSES

Galina A. Printseva

Drawings after instruments and scientific apparatuses are preserved both in the collection of the Hermitage (twenty-six sheets) and the Archives of the Academy of Sciences (42 sheets). If we consider that there were originally at least two boxes *Icones instrumentorum physicorum et mathematicorum* in the *Kunstkamera*, which together could have contained ca. 140-200 sheets, then it becomes clear that at the moment we only have a small number of these drawings at our disposal. As already indicated in my contribution on the fortunes of the 'paper museum', they were acquired from private individuals. Sixteen were purchased by the Hermitage Purchasing Committee in 1956 and ten were given to the museum by the Director of the Lomonosov Museum, V.N. Chenakal in 1976. It should be noted that forty-four drawings now preserved at the Archives of the Russian Academy of Sciences were also acquired from private collections in the years 1938 and 1939.¹ Nowadays, many of the objects depicted are preserved in the collection of Peter the Great's instruments at the Hermitage's Department of the History of Russian Culture, which is one of the richest collections of this sort. They were received from the former Peter the Great Gallery of the *Kunstkamera*. A considerable portion of the instruments were the property of the Tsar, some of them had been made in his turnery, others had been bought for him, still others came from the collection of Jacob Bruce, which in 1745 also became part of the *Kunstkamera*.

Depiction of the instruments and apparatuses was mainly done by the pupils of Andrey Konstantinovich Nartov (1693-1756). Nartov, a talented inventor of Russian descent, and personal turner to Peter the Great, worked in the tsar's Turnery starting in 1712. The Turnery was located in the Gallery, or the Servants' Quarters of Peter the Great's Summer Palace. From 1723 Nartov was chief turner in charge of the workshop.

In the early 1730s, the Turnery was moved out of the Servants' Quarters of the Summer Palace to the so-called Italian Palace on the Fontanka river, a long way from the Summer Gardens. It was at that time that two pupils joined Nartov's 'team', viz. Mikhail Semyonov and Pyotr Ermolayev, who stayed with their teacher until his death. The two of them plus Nartov's son, Stefan made all the Hermitage drawings of the instruments. Most of them belong to Ermolayev (for example cat.no. 541), a few are signed by Semyonov (cat. no. 552, dated 1735) and the rest, bearing no dates, are from Stefan Nartov's hand (see cat.no. 554). The same signatures are to be found on drawings from the Archives of the Russian Academy of Sciences (for instance cat. nos. 520, 523 and 531).

1. St Petersburg Archives of the Russian Academy of Sciences (SPBARAN), f. IX, op. 4, nos. 26 (reverse), 45.

Mikhail Semyonov and Pyotr Ermolayev had very similar biographies. Both were born in St Petersburg in 1713 and their fathers belonged to the Chancery of Building. Pyotr Ermolayev's father was a brick-layer; the occupation of Semyonov's father is not known. From their childhood, both had worked in various architectural teams; for some time it would appear they had worked for Mikhail Zemtsov because in 1731 they 'were taken from Mikhail Zemtsov to become pupils, on the demand of the then Court mechanic Nartov at the private Turnery of the Emperor Peter the Great'.²

2. Quoted from Gize 1988, p. 97.

Stefan Nartov, Andrey Nartov's eldest son was born in St Petersburg around 1723, Peter the Great was his godfather. Nartov sent him to study in the Instrument-making Chamber (workshop) of the Academy of Sciences, where he was officially registered from 1736 to 1740. During these years he worked on his father's projects. Nevertheless, Stefan did not seem to be inclined to follow in his father's footsteps, for he never became his associate and successor. He moved to Moscow, where his half-sisters (Nartov's daughters by his first marriage) were living; in 1756, the year his father died, he was in the army.³

3. Gize 1988, p. 167.

The turnery had been a separate unit until 1735 when it became part of the Academy of Sciences. Nartov moved with it and began working at the Academy as head of the new Laboratory of Mechanical and Instrumental Sciences, formed on the basis of the Instrument-making, Optical and Fitting Chambers. His pupils, among them Ermolayev and Semyonov were also transferred to the Academy. From that moment on, together with other masters of the Court Turnery, they were engaged in depicting instruments and scientific apparatuses, which 'is evident from the existence in the *Kunstkamera* of drawings made in perspective after globes and other mechanical instruments', as Gize points out.⁴ The dates on some of the pictures suggest that work on this project took place in 1735 and 1736. In 1736, Nartov returned from Moscow, where he had worked for some time, and had Ermolayev and Semyonov make the illustrations for his book *Theatrum Machinarum*. The work lasted for thirteen years, because during that period they worked on other commissions for the Academy, and unfortunately the book was never published.

4. Gize 1988, p. 159.

Which particular objects have been depicted in the Hermitage drawings? The first to be mentioned are a sundial and a star-dial, the most beautiful and most skilfully executed (see cat. no 541). Then, next in the range of complexity, are astronomic and geodesic astrolabes (cat. no. 523). Also very complicated to draw are artillery instruments, gunpowder-flasks, quadrants, and calibrating instruments.

The easiest to depict were drawing instruments, rulers, dividers,

plummets, and pantographs, as well as navigation instruments, mainly Buchholz' shipping moulds and John Davis'⁵ navigation quadrant. (cat. no. 546) All the depictions were executed exactly to scale, faithfully reproducing any inscriptions and ornamentation to be found on the original. The quality was not surprising seeing as the draughtsmen had had excellent architectural training under the architect Mikhail Zemtsov. On the whole the drawings are perfect, faithful renderings of the object depicted, their spatial perspective is accurate, and the delicacy of colouring conveys the texture of the material (wood, bronze, glass, etc.).

The drawings mainly show collection items produced by outstanding mechanics, such as Henry Winn (London), Johann Ernst Esling (Berlin), and Louis Chapoteau (Paris), as well as instruments produced at the Instrument-making Chamber itself. Some of the drawings have been used for the manuscript of *Theatrum Machinarum*, the book just mentioned which recapitulates on Nartov's lifelong experience in designing machine-tools, including lathes. Some of the machine-tool drawings are by Ermolayev and Semyonov. The manuscript also contains drawings of sundials, globes, astrolabes, and mechanical tools. The chief draughtsman must have been Ermolayev, for he is known to have attended the Drawing Chamber to improve his skills as a draughtsman.⁶

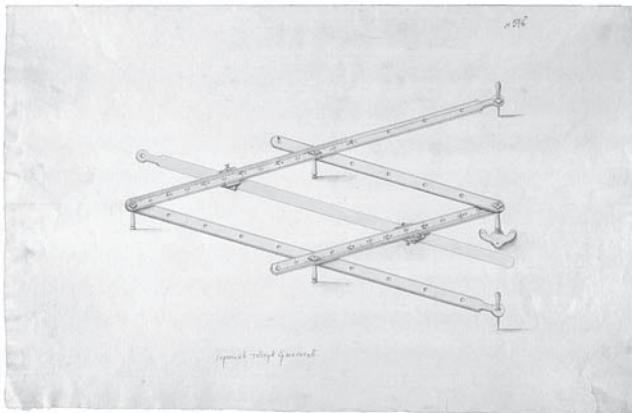
In having these unique instruments depicted in such detail, the Academy may have been contemplating using the drawings at a later date to make copies of these very same instruments and apparatuses. The collections of the early eighteenth-century drawings in the Hermitage and the Archives of the Russian Academy of Sciences are highly important for the study of the history of technology both in Russia and throughout Europe. Any museum of technology would be proud to have such objects in its possession. Besides, various aspects of the ornamentation depicted in the drawings of these instruments, such as engraving, embossing, moulding and casting, show that these are also outstanding specimens of eighteenth-century applied arts. The Hermitage has had them on display at various exhibitions, such as, for example, the *Theatrum Machinarum* exhibition of 1993 dedicated to the 300th anniversary of the birth of Andrey Nartov or the *Peter the Great and Holland* exhibition of 1996. Nowadays, the drawings are also important when carrying out restoration work, as they show how missing parts can be reconstructed and how objects can be made to function again.

5. John Davis (1550-1605) was an English navigator who travelled to the Dutch East Indies in 1598 with Houtman and Moucheron (information from Jozen Driessen).

6. Gize 1988, p. 161.

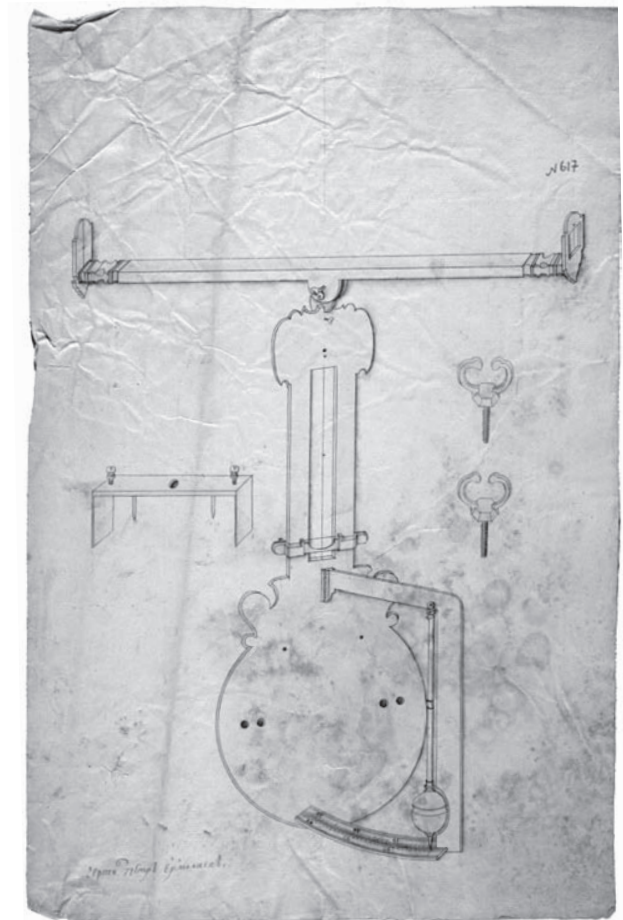
ICONES
INSTRUMENTORUM
PHYSICORUM ET
MATHEMATICORUM





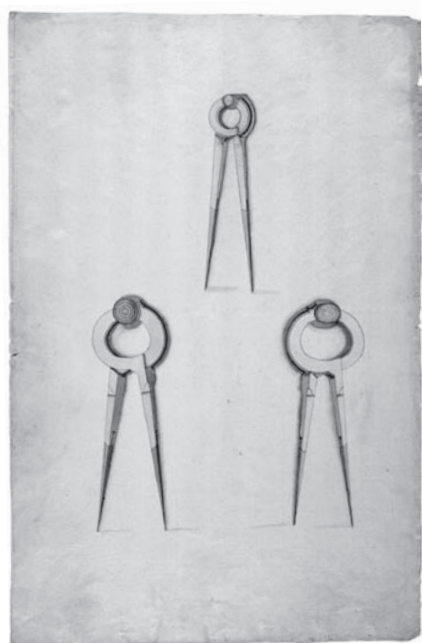
0501

0501
Brass pantograph. Late 17th-early 18th c.



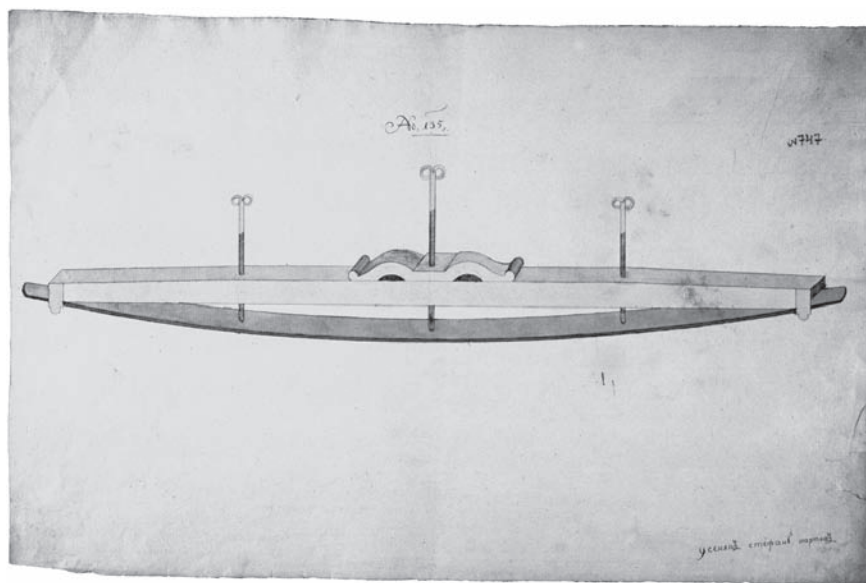
0520

0520
Protractor sighting device. Late 17th-early 18th c.



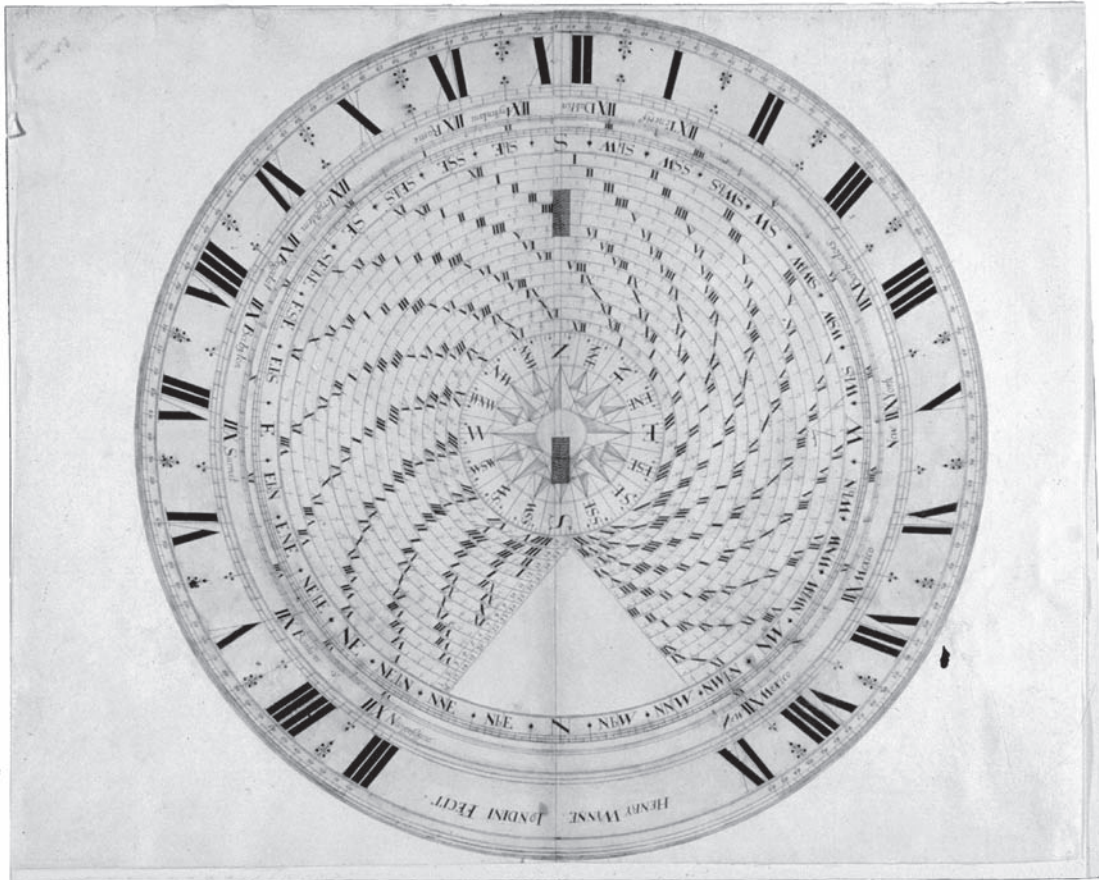
0521

0521
Three pairs of dividers. Made of brass and steel. Late 17th-early 18th c.



0531

0531
Unidentified instrument. Made of brass, wood and steel. Late 17th-early 18th c.



0543

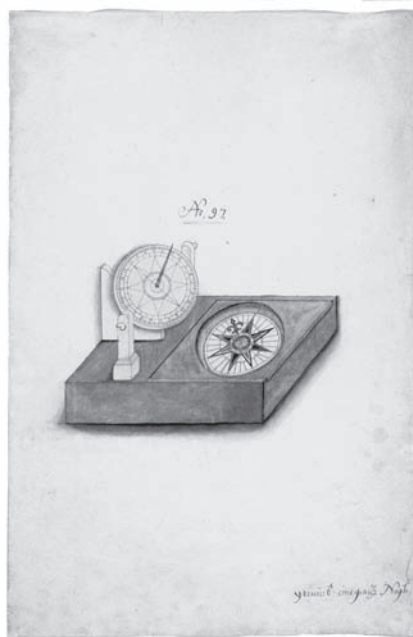
0543

Brass horizontal sundial without a
gnomon, by Henry Wynn of London.



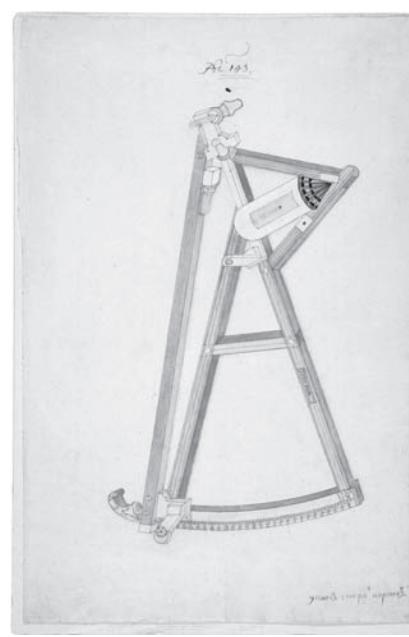
0541

0541
Universal ring sundial on a triangular
base.



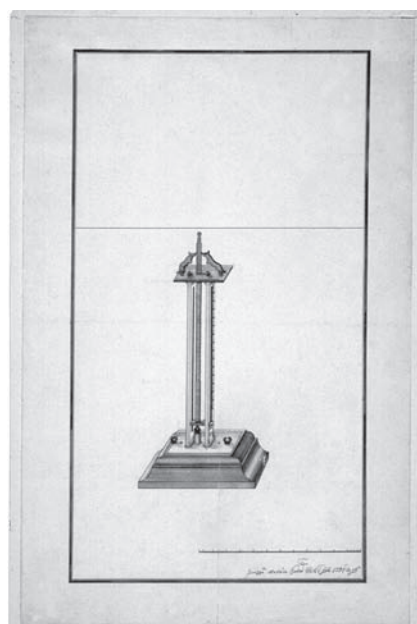
0544

0544
Sundial and compass on a wooden base.



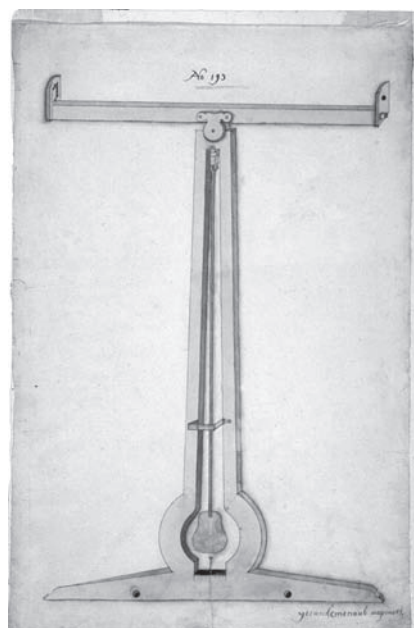
0546

0546
Wooden Davis quadrant or back-staff
with John Elton's artificial horizon sys-
tem.



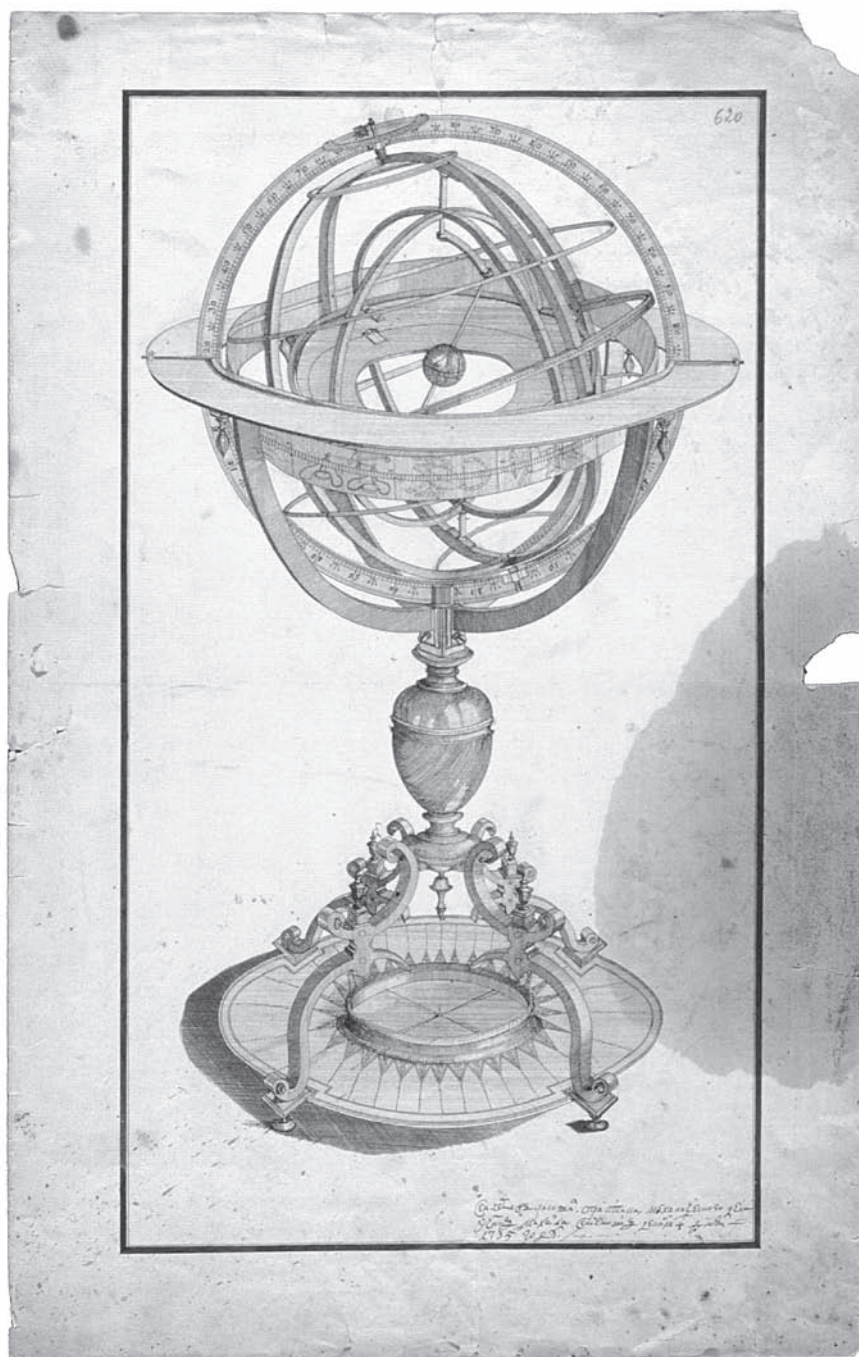
0552

0552
Artillery instrument called the 'gunpow-
der test'.



0554

0554
Brass water level with or gunner's tool.



0523

Brass armillary sphere on four embellished legs and a round support with a compass. It is an astronomical model with a globe in the centre, used to display relationships between the principal celestial circles according to the Ptolemaic system.

LATHING, IVORY CARVING AND OTHER RARITIES

Evgenya I. Gavrilova

In the collection of the Russian Museum there are 76 sheets of drawings of objects that have been lathed and of bone carvings, such as chalices and cups that fit one inside the other. Combinations of balls in intricate compositions, polyhedrons, pyramids, boxes and ivory plaques are also depicted. Other sheets show medallions with carved depictions, ivory and wooden statuettes, a carved altar and tabernacles, as well as miniature tool kits, for example agricultural tools, weapons, machine tools and distaffs. Lastly, there are also drawings of artistically worked natural materials, like a grain with a carved Buddha on it.¹ This type of objects constituted an important part of collections of art and rarities in the seventeenth and eighteenth century in Europe. These ‘artificialia’ were pieces made of animal or vegetable matter, whereby the makers tried to equal nature in their art. The *Kunstkamera* included pieces of ivory, bone and rare sorts of wood, such as boxwood and different nuts. Some of the objects depicted are said to have been turned or carved by Peter the Great himself. It is well known that the tsar loved doing this type of work and owned several lathes. Some of the objects depicted have survived and are currently in the Hermitage.

The earliest drawing in the collection of the Russian Museum is by Ivan Alexeyevich Sokolov, an artist who later became head of the Chamber of Engravings of the Academy of Sciences. The drawing in Indian ink is dated November 1735. It shows an *Octagonal marble relief depicting an old woman* (cat. no. 563). His four years of training with Ottomar Elliger is manifest in his bold brushwork and clear, delicate modelling. Sokolov’s brush and pen mastery in conveying minute details is also revealed in another drawing depicting *Four turned ivory ornaments* (cat. no. 604). It is not impossible that the anonymous *Drawing of a turned round box, a bowl and a turned ivory ornament* (cat. no. 613) is also by Sokolov, for the sheet has an inscription above the depiction, ‘the inside of this cup’, in a hand similar to Sokolov’s. Moreover, the style of the drawing is not dissimilar to his.

Phillipp Egorovich Mattarnovy painted the watercolour *A bowl with a low relief on a pedestal in the shape of Fortune* (cat. no. 632), probably depicting a seventeenth-century object from Germany.² It combines a somewhat clumsy execution of the figure and cup with a mastery in conveying the details of the gilt-bronze object. The latter must have been done with the assistance of a more experienced water colourist, possibly Andrey Grekov. Mattarnovy also produced the *Ivory compass case* (cat. no. 611) with a double-headed eagle, characterized by clear contours done in Indian ink. It shows an object that

1. For the history of the origin of this group of drawings see the contribution to the present publication by G.A. Printseva on the fortunes of the *Kunstkamera* drawings.

2. An analogue has been published by O.Ya. Neverov (see Exh. cat. Petersburg 1992, p. 31, no. 16: *A cup with Neptune* (Germany, 17th century)).

3. See Cracraft 1997, p. 259.

belonged to Peter the Great (now preserved in the Hermitage); the lid has been lost. The same object is depicted in the anonymous drawing, cat. no. 612, also depicting two medallions in low relief: *The Battle of Poltava* and *St. Andrew the First-Called*. The latter is traditionally attributed to Peter the Great, who founded this knightly order in 1698–99.³ Mattarnovy was also responsible for the accurately executed *Mechanical model of a windmill* (cat. no. 585). The latter is also depicted in cat. no. 586, which is a slavish copy by an unknown pupil of the Drawing Chamber.

Grigory Matveyevich Abumov produced accurate but somewhat amorphous depictions of weapons and agricultural implements. The sheet catalogued as no. 622, dated ‘20 May 1736’, gives a faithful rendering of 25 objects. The same applies to another signed drawing showing 34 objects, dated ‘18 August’ (cat. no. 621). These two drawings make it possible to ascribe the anonymous drawing catalogued as no. 623 to Abumov. It depicts 43 ivory objects in three rows, namely arrows, swords, rifles, maces, bows, harpoons, bear spears, saws, shovels, hoes, canes, pipes and an arquebus. Thereafter Abumov drew simple objects and his drawings were never copied again. Also worthy of notice are his *Ivory lamp*, *Two bowls*, and *Ivory snuffbox with a low relief, depicting Pygmalion and Galatea* (cat. nos. 617, 616 and 602). The drawings are the only testimony to his short artistic career. In 1745 he drowned in the Neva.

Mikhail Ivanovich Makhaev’s *Kunstkamera* drawings were all done during his period of training. At first, he studied under Georg Johann Unverzagt in the Mapmaking Workshop; it was not until 1735 that he became Elliger’s student. His drawings are therefore inferior to those of other *Kunstkamera* draughtsmen. He was responsible for two drawings of table decorations of Chinese bone carving (cat. nos. 620 and 628). They are accurate but characterized by a lack of feeling for form and texture.

The work of Grigory Anikiyevich Kachalov, like *Ivory basket* (cat. no. 610), a bold pen drawing with elegant brush modelling in monochrome watercolour, is in stark contrast to this. The same lathed object is shown in another anonymous drawing (cat. no. 590), together with a glass, distaff, and some smaller carved bone objects. The style of this drawing is characterized by some barely perceptible traits of Kachalov, which make it possible to ascribe this sheet to him. The same applies to another anonymous drawing (cat. no. 605) depicting table decorations, tabernacles, a shelf, a glass and a bracelet.

For Andrey Ilyich Polyakov the *Kunstkamera* project was not a difficult task. He depicted table decorations, carved snuffboxes, and

the medallion *Andrew the First-Called* (the same as the one depicted by Mattarnovy). He depicted a *Turned ivory ornament shaped like a staircase* and *Five medallions, possibly snuffbox lids* in watercolour (cat. nos. 606 and 630). The latter is also depicted in one of the later anonymous drawings (cat. no. 618) showing, in addition to snuffbox lids, a perfume bottle, a shell, and a medallion depicting Diana made by Peter the Great.

It is particularly interesting to compare drawings of similar objects by different artists, e.g. the *Turned ivory ornament* (see above), depicted in watercolour and Indian ink by Polyakov in June, with a drawing of the same object in Indian ink by Sokolov in May 1736 (cat. no. 607). Likewise, *Wooden covered goblet containing a set of beakers* by Polyakov in Indian ink and brown watercolour (cat. no. 591) is dated 19 April 1736. A similar cup was depicted by Makhaev, while on 22 April, Sokolov depicted two cups (inv. nos. 6 and 7) on the same sheet (cat. no. 593). The drawings are indicative of the three students' skill and mastery. The three drawings are equal in terms of accurate depiction (which was the main task) and of free style but the draughtsmanship in Sokolov's drawing is far superior.⁴ Late in 1737, Sokolov, like Grekov, and Kachalov were made apprentices 'for their industrious work', primarily in connection with the completion of the first part of the *Kunstkamera* series.⁵

Regretfully, the Russian Museum has no watercolours by Andrey Angileyeich Grekov. The entire collection of the paper museum includes only a few watercolours by him. This is strange, as Grekov was a curator and draughtsman of the *Kunstkamera* from 1732, when still a pupil, and was to depict objects in the collection in watercolour and Indian ink for a number of years. Can it be that his watercolours are among the anonymous 'curiosities', especially as he is known to have depicted the 'monster' chicken and lamb?⁶ There are, however, a few anonymous drawings in the Russian Museum that can be ascribed to Grekov stylistically. For example, the *Tree root shaped like a pheasant* and *Two lemons with smaller lemons inside them* (cat. nos. 496 and 497) or *Two carrots shaped like a bear's paws* (cat. no. 498) have been depicted in the finest gradations of yellow, golden-orange and red-brown tones, conveying the modelling and texture of the objects.

A large number of the drawings in the Russian Museum are not signed or dated. The anonymous drawings worthy of mention include those depicting objects preserved in the Hermitage, e.g. the cup made of rhinoceros horn with an equestrian battle scene on the bowl, the base in the shape of four slaves, and a Roman emperor on the lid (Germany, seventeenth century). The same sheet has a depiction of

4. See also the contribution to the present publication by Elena Stetskevich.

5. Alekseeva *et al.* 1985, pp. 61-62.

6. Shafranovskaya 1965, p. 152.

7. According to O.Ya. Neverov, the statuette is of German early eighteenth-century work. However, the complicated hairstyle and powerful masculine forms are suggestive of seventeenth-century Flemish art (cf. the woman in *Cephalus and Procris* by T. Rombouts in The Hermitage).

8. *Musei Imperialis Petropolitani* Vol. II, *pars prima*, St Petersburg 1741, p. 83, nos. 6-13. See also Exh.cat. St Petersburg 1996, pp. 56-69.

a Chinese carved sphere, an ivory object on an ebony stand, which had been lost and later recovered (cat. no. 633). Other drawings show a snuffbox in the shape of a Dutch schooner (cat. no. 839), once the property of Peter the Great. Also worthy of mention are a carved wooden triptych altar (cat. no. 560) and *Statuette of Juno with a peacock* (cat. no. 574), a drawing of a seventeenth-century Flemish statuette in ivory.⁷ Other anonymous drawings depict ivory reliefs, which originally belonged to the Tsar's workshop, namely the *Beheading of St. Paul* and *Aeneas rescuing his father from burning Troy Anchises* (cat. nos. 567 and 569) and two drawings of wooden statuettes of *The Virgin and Child* (cat. nos. 577 and 578). The *Diana* medallion made by Peter the Great was probably lost during the 1747 fire, but it can be seen in the anonymous drawings probably dating from the 1740s (cat. nos. 608 and 631).

The depiction of four male heads of wax in a glass case (cat. no. 559) is absolutely unique in the collection of the Russian Museum. O.Ya. Neverov identified three of the four as Frans Lefort, Peter the Great and Alexander Menshikov, corresponding with the description in the *Musei Imperialis Petropolitani* catalogue from 1741, viz. 'The head of Peter the Great and the seven persons accompanying him in 1698 on his trip to Belgium. Wax'.⁸ The drawing represents four participants of the Great Embassy. It should be noted that while the wax likeness of Lefort is very similar to the engraved portrait by Petrus Schenk (1698) and the portrait of Menshikov closely resembles the bust by Bartolomeo-Carlo Rastrelli, the depiction of Peter the Great bears no likeness to either of the two portraits from the late 1690s by Jan Weniks and Georg Kneller or the portraits by Louis Caravaque. The wax portrait depicts the Emperor late in life (like I. Nikitin's and G. Tannauer's portraits). The fourth person depicted (the one on the far right in the glass casing) is allegedly one of the then closest associates of Peter the Great, Andrey Artamonovich Matveev (1666-1723), who in 1699 was appointed Ambassador to the Netherlands. A comparison of the wax head with the well-known portrait by Rigo (1706), now in the Hermitage, confirms this. (The facial proportions, the shape of the nose, eyebrows and lips, and even the chin with a dimple are similar in both depictions). The drawing may have been made after the fire in the *Kunstkamera*, which only four of the eight heads survived. It is also possible, however, that a companion portrait has been lost. It is not known who did the drawing but the sculptor may well have been the renowned Bartolomeo-Carlo Rastrelli, creator of the wax *Peter the Great* (The Wax Person) and the statue of Peter the Great in front of the Mikhailovsky Castle.

The stylistic similarity of the *Kunstkamera* drawings (the pedantic attention to detail, the rigid modelling of form, especially folds of cloths, etc.) is not only the result of the artists' training based on copying Preisler's originals. (Preisler's manual was published in Russian by the Academy of Sciences in 1734).⁹ It was also due to the task itself, namely to make true-to-life illustrations for the catalogue of the *Kunstkamera*. There is a charming naivety in the artists' attention to detail. The drawings are by artists of different maturity and talent.

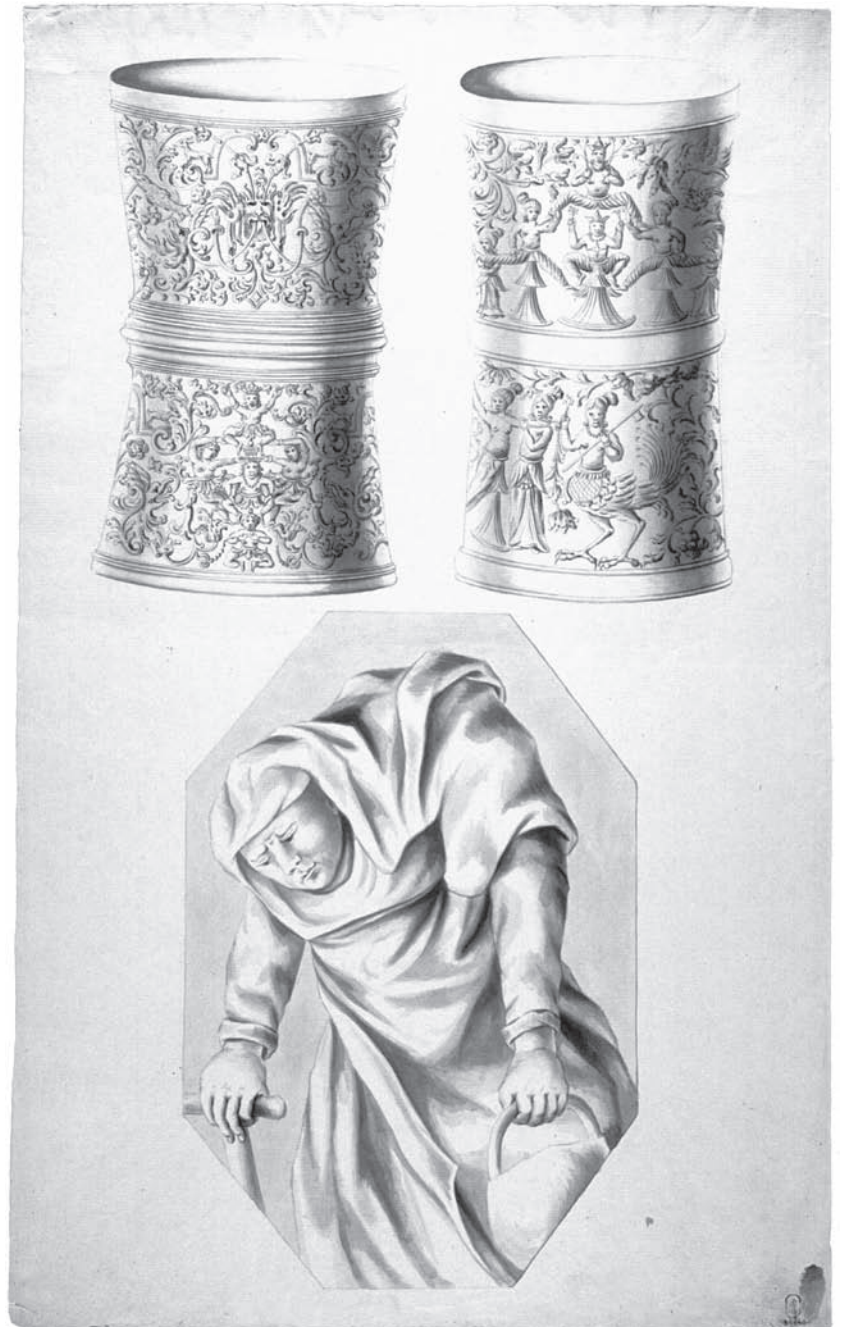
Summarizing briefly, the drawings by Sokolov, Kachalov, and Mattarnovy in the Archives of the Russian Academy of Sciences (St Petersburg Branch) are characterized by precise pen contours and well-defined brush and Indian ink patches. (The finest contours are in brush, rather than pen, in some of the drawings.) In Abumov's and Makhaev's drawings, the contours are not so well done and the brushwork is unclear. Generally, however, one has to accept Josiah Weitbrecht's comment in 1737 about all of the drawings: 'While some of them are not perfect, it should be taken into account that these are products of the art mastered at the Academy in a very short time'.¹⁰ Almost three hundred years later, their drawings and the many anonymous sheets give us a good impression of the lathed and artistically worked objects in the *Kunstkamera*. This impression will certainly help to identify the objects that once formed part of the collection and are now stored in other museum repositories.

9. Johann Daniel Preissler, *Osnovatel'nye pravila ili Kratkoe rukovodstvo k risovalnomu hudozestvu [...]* [Basis Rules or Concise Manual of the Art of Drawing], St Petersburg 1750 (1st edition 1734; cf. German edition Preissler 1728-1731)

10. Alekseeva *et al.* 1985, p. 15.

ICONES OPERUM
ARTIFICIOSORUM
ICONES RERUM
RARIORUM





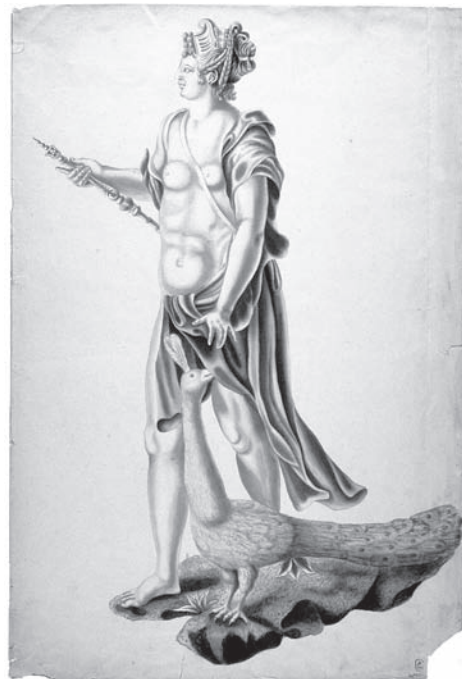
0564
Three objects. Above: two ivory mortars
from India decorated with arabesques
and dancers. Below: an octagonal marble
relief of an old woman with a staff and a
pitcher.

0564



0567

0567
Oval low relief on a rectangular ivory
plate, depicting the beheading of St. Paul.



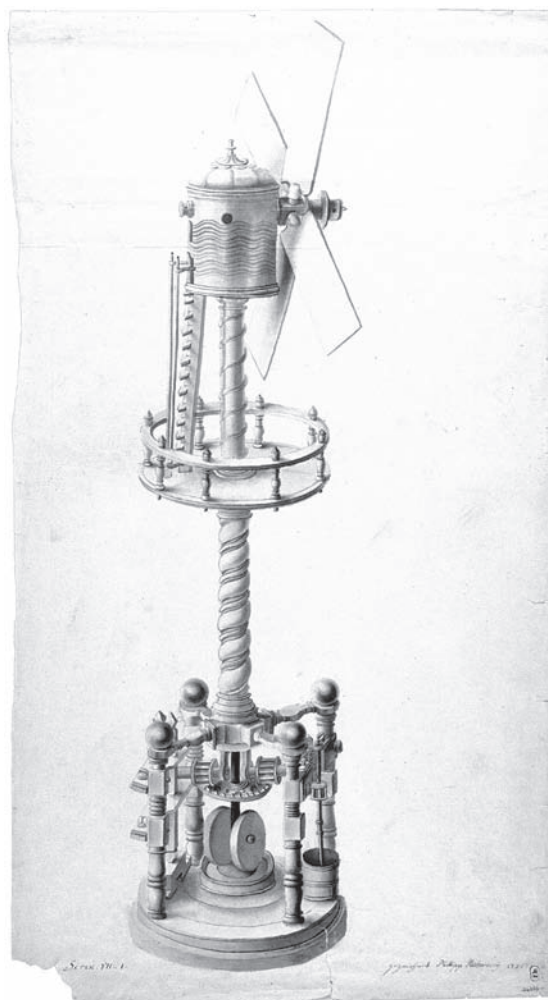
0574

0574
Carved ivory statuette of Juno and the
peacock.



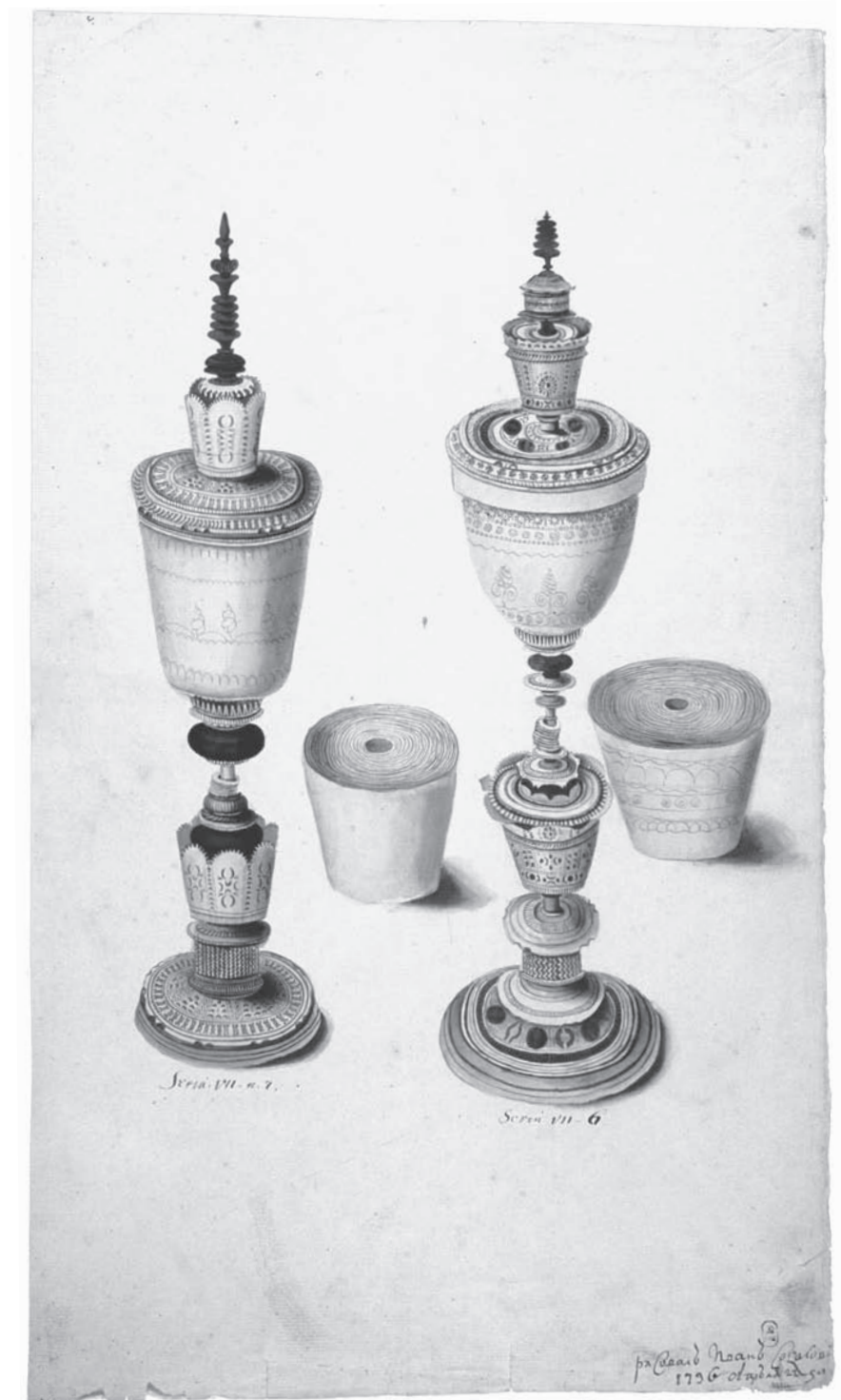
0577

0577
A wooden statuette of the Virgin and Child, seen from three sides.

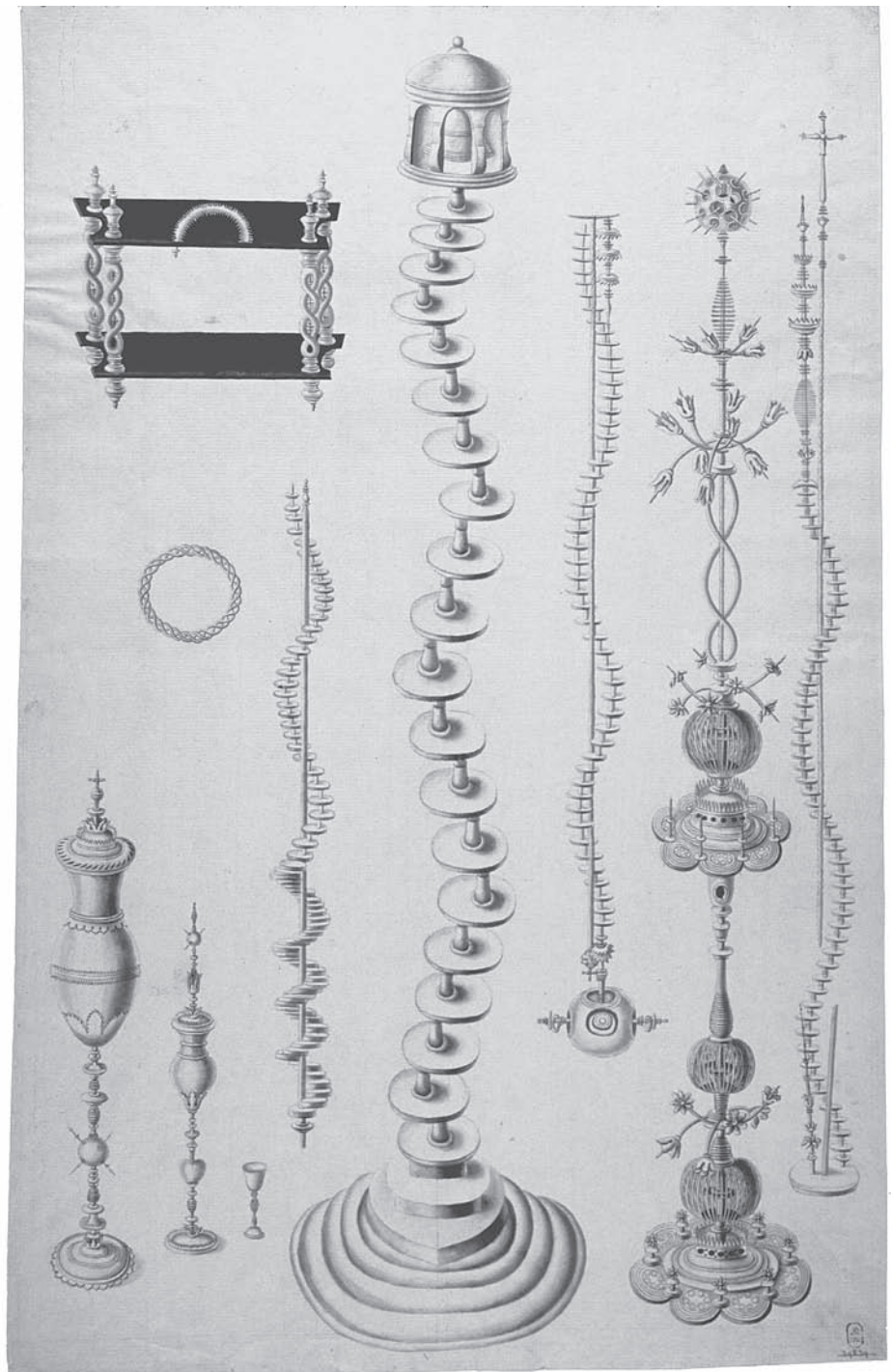


0585

0585
Mechanical model of windmill.



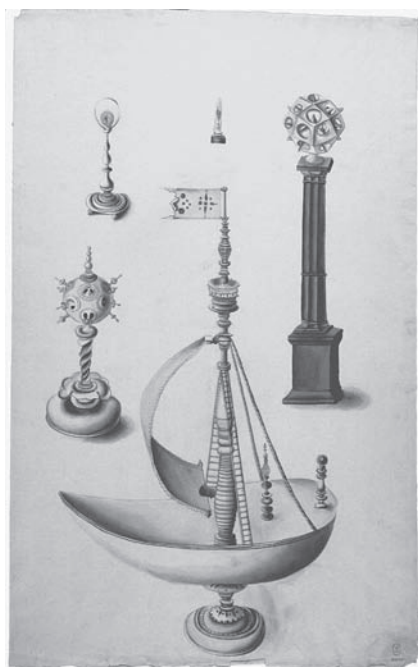
0593
Two wooden covered goblets, both containing a set of beakers, placed one inside the other.



0605

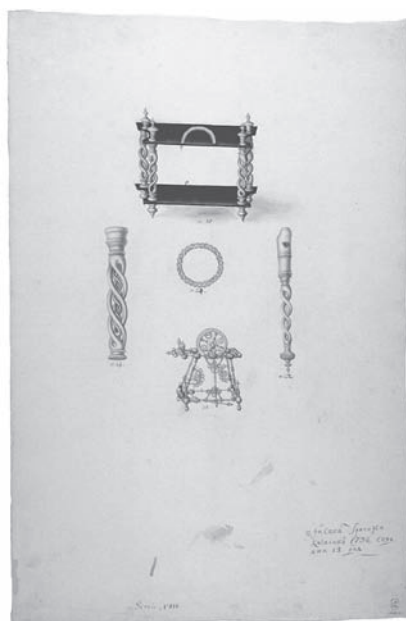
Ten objects. Upper left: two shelves supported by turned legs. Middle left: a twisted bracelet. Lower left: three goblets. Centre and right: five turned ivory ornaments, of which four are shaped like spiral staircases.

0605



0601

0601
Five carved and turned ornaments. Upper left: a carved cherry stone on a stand. Upper centre: a carved seed (?) with a depiction of a Buddha in a glass container on a stand. Upper right: an ivory sphere on a stand. Middle left: an ivory polyhedron on a stand. Lower centre: an ivory boat.



0625

0625
Five objects. Upper centre: two shelves supported by turned legs. Middle left: a turned ivory leg. Middle centre: a twisted bracelet. Middle right: a turned ivory flute. Lower centre: an ivory spinning wheel.



0628

0628
Two ivory ornaments. Above: a sphere on a stand. Below: a polyhedron on a stand.

PRECIOUS AND RARE OBJECTS

Galina A. Printseva

Among the objects in the Hermitage Department of the History of Russian Culture there is a leather-bound cardboard filing box with an inscription on its spine which reads: *Iconum adparatus pretiosi. Vol. 1*. This is one of the three boxes with drawings of precious objects mentioned in the catalogue *Musei Imperialis Petropolitani Vol. II* from 1741.¹ The two other boxes of drawings have not been preserved. The one that is still in the Hermitage contains 138 drawings, of which a large number depict archaeological objects. In addition to this there is a small group of precious objects, some of which also function as memorial pieces. The drawings show the objects which in the 18th century were housed in room TT, in the left wing of the ground floor of de *Kunstkamera* (see Introduction, ill 4). Here is where, according to the *Palaty Sankt-Peterburgskoy Imperatorskoy Akademii nauk Biblioteki i Kunstkamery* (Guide to the ‘Chambers of the Library and the Kunstkammer of the St Petersburg Imperial Academy of Sciences’) from 1744 by Johann Daniel Schumacher, they kept ‘Various curiosities and valuable items made of gold, silver, decorated with precious stones’, including ‘ancient Tartar and Persian gold daggers, gold and silver objects, decorated with precious stones, found in graves’, as well as, in a separate cabinet, ‘all sorts of valuable objects made of gold and silver, such as glasses, cups and other similar vessels, plus keys to various captured cities’.² In the same room was to be found a silver replica of La Fontana dei Quattro Fiume by Lorenzo Bernini, representing a miniature of the fountain of four rivers on a pedestal (cat. no. 921). A small group of watercolours preserved in the above-mentioned box show objects from the room called ‘The Emperor’s Workshop’, marked on the floor-plan of the *Kunstkamera* with the letters ‘BB’ (situated on the second floor of the left wing). These consist mainly of watercolours of memorabilia and trophies.³ Of the 138 watercolours in the box, 35 are depictions of cups, vessels, and other miscellaneous objects. (see also the article by O.Ya Neverov).

Some of the objects depicted are directly connected to Peter the Great and his closest associates, friends and family members. One spectacular specimen is a watercolour by Ottomar Elliger from ca. 1735, which depicts the cup decorated with cameos which the king of Denmark gave to Peter I as a gift in 1716. The cup has not come down to us, therefore its depiction is a rarity in its own right. Besides, the watercolour is the only signed work by Elliger in the Hermitage box of drawings described here. Another watercolour, in which gold paint has been used, stands out because of the highly professional way in which it has been painted. This shows a renowned, silver-gilt monstrance from 1474 ‘made in accordance with [the rules of] ancient

1. *Musei Imperialis Petropolitani Vol. II, pars prima*, St Petersburg 1741, p. 178, nos. 47-49: *Icones adparatus pretiosi*.

2. *Palaty Sankt-Peterburgskoy* 1741/1744, pp. 23-24. See also Bacmeister 1799, pp. 177, 179.

3. *Materialy* 1885-1900, vol. VII, pp. 300-322.

Gothic architecture', now in the Hermitage (cat. no. 941), which until the early eighteenth century was kept in St Nicholas's church in Reval (now Tallin). Lord and commander-in-chief Alexander Menshikov, one of Peter the First's best friends, took it as a trophy and brought it to St Petersburg. Shortly afterwards, Menshikov gave it to Peter the Great; it stayed in his collection until his death in 1725, when the Court Superintendent Meshkov had it transferred to the *Kunstkamera*. Among the depictions of other unusual gifts given to Peter the Great are those of memorial cups, e.g. a gilt cup on ball-legs, given to the Tsar on the occasion of a ship's launch (cat. no. 917). Another memorial cup, with a castle engraved on it, (cat. no. 915) was made in honour of a similar event: Peter the Great had a hand in the construction of the ship being launched. This cup, given to the Tsar by his wife Catherine, had sixty-four depictions of French ships on them (present whereabouts unknown).⁴ Also to mark the launching of a ship, Count Fjodor Apraksin gave the Tsar a silver cup with his coat-of-arms in the centre (cat. no. 914; present whereabouts of the cup unknown).

Among the war trophies most valued by Peter the Great is the key to the city of Derbent. In the drawing the long silver key is depicted lying on a decorated tray on which it was probably presented to the tsar in 1722 (cat. no. 922). The tsar himself ordered to have the tray and the key transferred to the *Kunstkamera* as curiosities.⁵ Nowadays, the key is in the Museum of Artillery, Engineering Corps and Signal Corps in St Petersburg. Judging by the style of the depiction, the same artist (still unknown) has drawn a Swedish silver mace with a coat-of-arms, taken as a trophy at Poltava, which according to tradition, belonged to king Charles XII of Sweden (cat. no. 943). This object is to be found nowadays in the Armoury of the Kremlin in Moscow.⁶ By the same unknown artist there is the depiction of a Turkish gunpowder-flask, described as 'Turkish gunpowder horn made of mother-of-pearl edged in silver and gilded' (cat. no 951; now in the Hermitage).⁷ The flask also came to the *Kunstkamera* from Peter the Great's collection, although it had not been found on a battlefield but bought at a sale.

Other examples of drawings depicting valuable gifts or memorabilia can also be given. For instance, to Peter the Great himself, the citizens of Vyborg gave a golden cup with the emblem of the city, which had been captured by the Russians (cat. no. 916; present whereabouts of the cup unknown). From the Court of Wallachia there are two batons, viz. one 'of the chancellor of the Duke of Wallachia, inlaid with mother-of-pearl and tortoiseshell and the other 'of the Field-Marshal to the Duke, made of ebony, with a silver knob'. Both were

4. Liven 1901, p. 13, no. 16.

5. Shafranovskaya 1965, p. 153.

6. *Materialy* 1885-1900, vol. VII, p. 314.

7. *Ibid.*, p. 316.

sent to the *Kunstkamera* by 'His Imperial Majesty's Court' (cat. no. 945; now in the Hermitage). Lastly, a coconut cup with a silver-edged rim made by Peter the Great is depicted life-size (cat. no. 918). The object, now in the Hermitage, had been among the tsar's personal belongings and was given to the *Kunstkamera* by Menshikov.

In addition to memorial objects connected with Peter the Great, the drawings show various remarkable and precious objects from the tsar's personal collection, which he most probably greatly valued, e.g. a fourteenth-century Syrian glass horn in a sixteenth-century German silver-gilt frame (cat. nos. 926, 927; objects now in the Hermitage). Another drawing shows the silver table decoration mentioned earlier consisting of a miniature copy of the Four Rivers Fountain on de Piazza Navona in Rome by Lorenzo Bernini. According to the Academy publications 'Ceasar Antoninus Caracalla ordered the Egyptian obelisk to be taken to Rome and Pope Innocent x had it installed over the fountain' (cat. no. 921).⁸ Also worthy of a note are depictions of agate vessels, viz. a cup made from milky agate with coral dolphins as decoration (cat. no. 929) and a vase made from red agate (cat. no. 969; both vessels are in the Hermitage), as well as cups and vases made from nautilus shell, or amber objects much valued by Peter the Great (cat. nos. 920, 930, 935, 936). The collection of drawings has a depiction of a mace, made from a narwhal tusk received from the Court physician Areskin's collection. It is described in the catalogue *Musei Imperialis Petropolitani Vol II* as 'a Tartar sceptre made of fish bone, with a silver-gilded knob and tip'⁹ (cat. no. 876; now in the Hermitage).

8. *Ibid.*, p. 312.

9. *Ibid.*, p. 303.

Most of the drawings in the box-file from the Hermitage's Department of Russian History are unsigned. This holds, by the way, for the entire corpus of the 'paper museum'. Of the 21 signed drawings, eleven watercolours painted by the artist Grekov are of outstanding quality. Of the depictions of *pretiosi*, eleven have been signed with ? or G, which means that the drawings are by Grekov, a leading artist working for the Drawing Chamber of the Academy of Sciences. One of the watercolours has a more complicated monogram, viz. P.G. 'pinxit Grekov [Andrey Grekov]' (cat. no. 888). Of these eleven signed watercolours, three have been dated, viz. a set of dagger decorations (cat. no. 888), to 1735; depictions of rings also to 1735 (cat. no. 937), while a Chinese ornamented flask (cat. no. 1318) bears the date 1736.

Andrey Grekov's life has been described for the first time by Elena Stetskevich.¹⁰ He was the son of a Greek in Russian service, Angileos Delilo, Inspector of the Galley Fleet. He started as a pupil of the then well-know artist Andrey Matveev, who had studied in Holland and

10. Stetskevich 1997.

returned to Russia in 1727. In 1729, Matveev moved to Moscow and Grekov had to look for another teacher. In the same year, he became a student of painting at the new Academy of Sciences in St Petersburg, under George and Maria Dorothea Gsell. Having completed his studies, in 1732, he was appointed to the *Kunstkamera*, where, according to the appointment order, he was ‘to depict various *Kunstkamera* objects’.¹¹ Besides this, he was also the curator of the anatomical and zoological collections. It is known that in 1734 he was married, since in that year, during Maria Dorothea Gsell’s visit to Holland, M.I. Grekova, ‘the draughtsman’s wife’ was appointed ‘to look after *Kunstkamera* curiosities and to clean the cabinets, both inside and out’.¹²

On 16 November 1737, Grekov and the pupils of the Engraving Class, Ivan Sokolov and Grigory Kachalov were appointed apprentices (a higher grade), which also meant an increase in salary. The three of them were to teach drawing classes at the Academy Gymnasium, where Grekov replaced his former teacher George Gsell. Andrey Grekov’s responsibility was to depict objects from the anatomical collections of the *Kunstkamera* ‘with a zeal and industry exceeding anything shown earlier’.¹³ In 1743, he was officially made teacher of drawing, simultaneously being made responsible for all drawing matters at the *Kunstkamera*. During the same period, Grekov began working on Empress Elizabeth Petrovna’s coronation book, where he was ‘illuminating coronation designs’, mostly ‘regalia and similar objects of gold and silver’.¹⁴

The best watercolours Grekov made depicting precious and rare objects from the *Kunstkamera* were created in the years 1735–1736. As a rule, the objects he was drawing were large in size and had complicated shapes, e.g. the above-mentioned Chinese enamelled flask and the numerous cups and vases discussed earlier. In each watercolour, he was able to convey the shape, volume and texture of the object depicted using vivid intense colours, including gold, which he used skilfully. It should be noted that Grekov’s idiosyncrasy was that he did not use a pen or pencil, but drew lines with soft, although infallibly confident brushstrokes, and used smaller ones to depict the ornamentation, however complicated it might be. Normally, he placed the shades of the objects depicted, grey-blue or brown, to the right of the object. His drawing technique is characterised by his accurateness of line; his use of pink hues to suggest gold is striking, cf. in the drawings of the Vyborg cup (cat. no. 916), three agate cups (cat. no. 932), a knife and fork with amber handles (cat. no. 936), a silver-gilded crown (cat. no. 942), a baton made of a narwhal’s tusk (cat. no. 876), and three golden ornaments (cat. no. 878). The same style characterises

11. *Materialy* 1885–1900, vol. IX, p. 21.

12. Stetskevich 1997, p. 252.

13. Alekseeva *et al.* 1985, p. 62, no. 15.

14. *Materialy* 1885–1900, vol. VII, p. 138.

a number of Scythian gold plaques from Siberian barrows (cat. nos. 854, 859, 906, 907, 875, 866, 865, 870, 867, 871, 869, 955, 950, 872, 885, 970, 900, with 18 objects in total). All in all, the Hermitage collection has 22 watercolours by Grekov, of which half are signed.

Andrey Grekov was also involved in colouring in prints. In 1748 on the orders of the Chancellery, Grekov was given the job of illuminating the engravings of the objects in the Scythian collection; ten of these, excellently illuminated engravings are now preserved at the Hermitage. Simultaneously, Grekov was depicting objects from the Siberian and Kamchatka expeditions, as well as ‘botanical objects’ for the engraver Johann Grimmel (1703-1759).¹⁵

In 1750, Grekov was dismissed from his position at the *Kunst-kamera* on health grounds, and was appointed to teach at the Academy University. That was not the end of his career. In 1761, he was appointed to the position of drawing teacher to Grand Duke Pavel Petrovich, the son of Catherine the Great. This fact suggests that he was at the time considered to be the best Russian draughtsman of his time. He retired in 1765, having been promoted to the rank of first lieutenant and was, apparently, given a pension in keeping with his rank.¹⁶

As already stated, signed works by other artists are scarce in the Hermitage collection. In a somewhat different context a few of these drawings have already been discussed in an article by Oleg Ya. Neverov on antiquities, rarities and precious objects in this book. There is only one drawing in the Hermitage, of an agate necklace, signed by Mikhail Makhaev. The work is of an inferior quality (cat. no. 939; present whereabouts of this object unknown). In addition to the artist’s signature, it has the date, ‘year 1736, 10th day of January’. A similar necklace and a rosary were drawn by Grigory Abumov; the drawing, also of inferior quality, has been engraved by the artist.¹⁷ The Hermitage collection has three drawings by Ivan Sokolov. These works (cat. nos. 557, 573, 579) are totally different in style from that of Grekov’s watercolours. They have clearly been made by an apprentice from the Engraving Chamber, rather than by a student of drawing proper. Two of the drawings were made using pencil and Indian ink contours; they are monochrome. Particularly striking is the ivory figurine, *Juno and the peacock* from 1735 (cat. no. 573), with its faithful rendering of details. Drawings by another pupil of the Engraving Chamber, Grigory Kachalov also betray an engraver, rather than a colourist. His four drawings in the Hermitage collection, although monochrome, show masterly execution that manifests itself in the precision of lines and the modelling of half-tones, cf. for example

15. *Materialy* 1885-1900, vol. IX, p. 489.

16. Stetskevich 1997, p. 256.

17. Alekseeva 1985, p. 97.

Relief depicting Diana with her nymphs bathing in a grotto and Two wooden figures of a man and a woman (cat. nos. 561, 562). Also by a student of engraving, Andrey Polyakov (1709/1712-1784), is a drawing depicting a brown wooden cabinet with bone inlays designed to store gemstones (cat. no. 967).

As has been noted more than once the drawings belonging to the 'paper museum', including the sheets of drawings kept at the Hermitage Department of the History of Russian Culture, are some of the earliest specimens of non-religious painting created by Russian draughtsmen. As such, these drawings are of great importance for Russian art history. In addition the drawings of the objects help the spectator to partially recreate the exhibition of the first Russian museum: the *Kunstkamera* in St Petersburg.

ICONES OPERUM
ARTIFICIOSORUM
ICONES RERUM
RARIORUM





0584

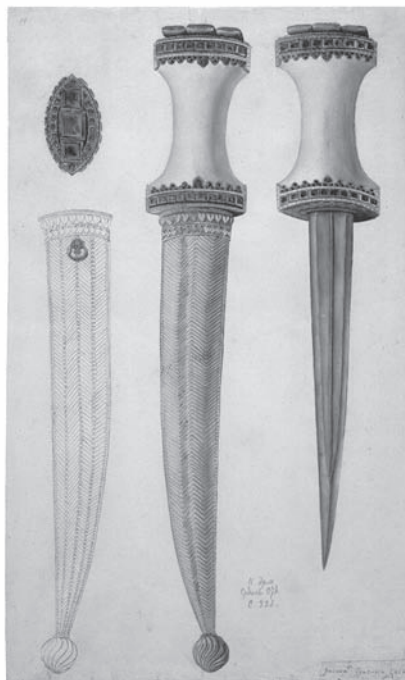
0584

Table decoration of coral and metal, with a base probably made of gilded silver. The decoration shows a depiction of King Solomon's castle and the Solomon Judgment, surrounded by the signs of the Zodiac.



0573

0573
Carved ivory statuette of Juno and the
peacock.



0841

0841
Dagger with a bone hilt decorated with
emeralds and rubies, depicted sheathed
and unsheathed. An outline drawing of
the sheath and the top of the hilt are de-
picted separately to the left. Object from
Iran, 17th c.



0844

0844
Kris (dagger) and sheath with a gilded
silver hilt in the shape of an idol. Object
from Indonesia, 17th c.



0857



0870

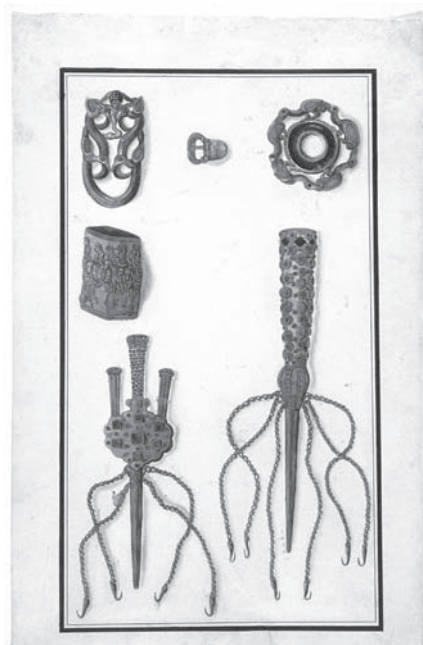
0857
Scythian golden necklace with lions at both ends. Siberia, 5th-4th c. BC.

0870
Scythian golden belt plaque depicting a struggle between an eagle and a tiger. Object from Siberia, 5th-4th c. BC.



0881

0881
Two silver objects. Upper left: handle of an Achaemenid pitcher, in the shape of a deer. Lower centre: Achaemenid rhyton in the shape of a ram's head. Objects from Iran, 5th-6th c. BC.



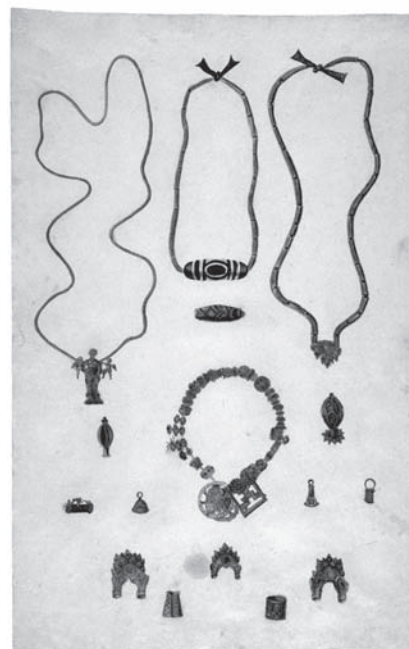
0885

0885
Two decorations for a turban and four other decorations. Objects from Turkey, 17th-18th.



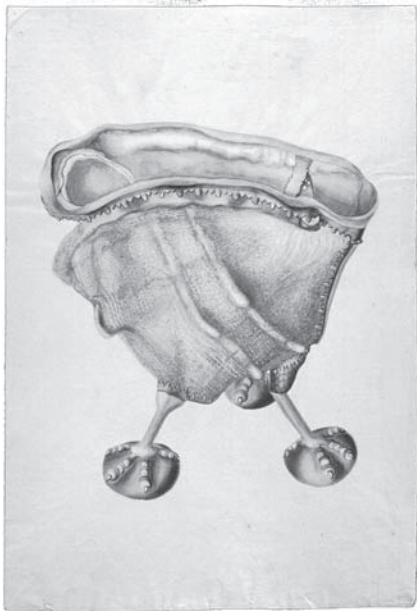
0894

0894
Silver *phalar*, partly gilded, decorated with an elephant. Object from Bactria, 3rd-2nd c. BC.



0908

0908
Sixteen jewelry works: necklaces, pendants, and ear-rings of gold, glass, and stones.



0919

0919
Shell cup on three legs used by Peter the Great on his travels. Object from Holland, late 17th c.



0921

0921
Silver table decoration, a copy of the Four Rivers Fountain by Lorenzo Bernini in Rome: an obelisk surrounded by river gods and a balustrade.

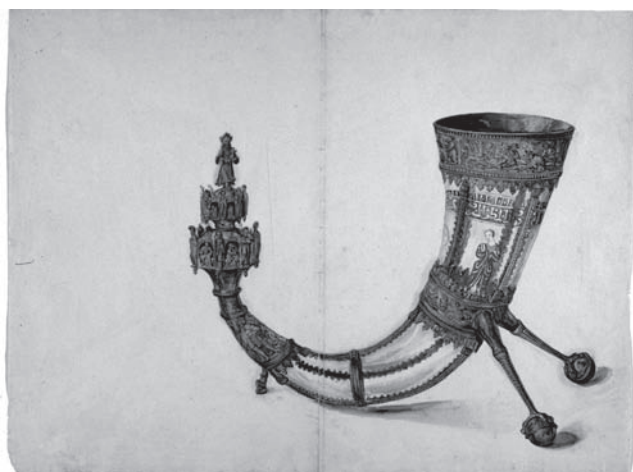


0933

0933
Vase decorated with gems and enameling, on three dolphin-shaped legs. Object from Europe, 17th c.



0922



0926



0938

0922

Key to the Derbent fortress displayed on a piece of Persian cloth and the dish on which Peter the Great was presented with the salted bread of hospitality, together with the key itself on August 23, 1722.

0926

Drinking horn of painted glass in an engraved frame of gilded silver, with gilded silver legs in the shape of a bird's feet clasping spheres.

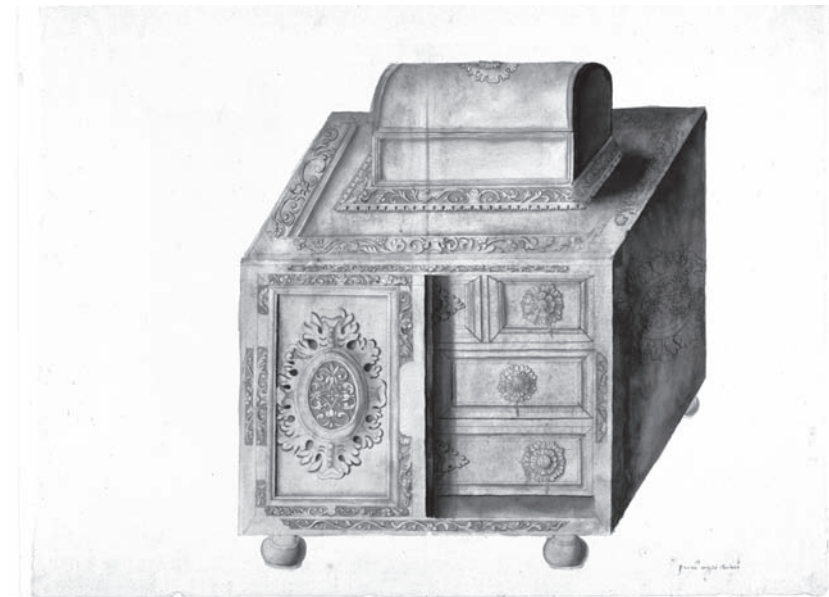
0938

Two lots of four necklaces of agate beads. Objects from Western Europe, 17th- early 18th c.



0946

0946
Small ivory cabinet with a low-relief decoration, depicting the Fall of Adam and Eve. Made from ivory, wood and silver. Object from the East-Indies (Ceylon), 17th c.



0967

0967
Gem cabinet made of brown wood, decorated with ivory.



1318

1318
Flattened round moon flask decorated with clearly outlined ornaments of flowers and a pair of pheasants. It has a chain on the sides and two loop-handles in the shape of dragons. Made from bronze, cloisonné enamel and gilding. Object from China, late 16th-17th c.



1319

1319
Mechanical toy on wheels – a Chinese woman sitting on a flying phoenix. She is the Taoist goddess of the West, Xiwan-gmu, and is holding a plate with peaches in her hands. Made of silvered tin, enamel, paint, Indian ink and other materials. Object from China, early 18th c.

ANTIQUITIES, RARITIES AND PRECIOUS OBJECTS

Oleg Ya. Neverov

Several ‘paper museum’ drawings depict objects that were once part of the so-called ‘Tsar’s cabinet’, the term used to describe Peter the Great’s private collection. One of the places in which they were stored, together with other drawings whose subjects were antiquities and special *objets d’art* (‘rarities’), was in the boxes inscribed *Icones operum artificiosorum*, *Icones rerum rariorum* and *Icones adparatus pretiosi*. At present these drawings are to be found in the Hermitage and in the Archives of the Academy of Sciences in St Petersburg. A number of these drawings will be discussed in this article, focusing on where the objects depicted in the drawings were once to be found in the *Kunstkamera*.

In 1745, the librarian of the Academy of Sciences, Johann Caspar Taubert, on the orders of Empress Elizabeth Petrovna, made an inventory of the ‘precious objects’ to be found in the *Kunstkamera*, with the accompanying provenance.¹ This was a Russian (edited) version of the section of the *Musei Imperialis Petropolitani Vol. II* called ‘Catalogus operum pretiosorum ex auro et argento factorum nec non gemmarum, quae in aedium academicarum camera TT. servantur’.² In Taubert’s inventory one of the items is a detailed description of a ‘Japanese cabinet made of carved ivory with seven drawers’, that was included in the *Kunstkamera* after the Tsar’s death. The cabinet comprises 52 objects, viz. 8 precious daggers and 44 of the largest and most impressive objects of the Scythian Siberian collection that the iron-foundry owner Nikita A. Demidov had given Peter the Great in 1715. One of the objects Taubert described as an American dagger with a hilt of silver-gilt, in the form of an ‘American idol’; a blade, with gold inlays; a sheath, decorated with embossed silver and gold, from Albert Seba of Amsterdam. Nowadays this is considered to be a seventeenth-century dagger from the island of Java in Indonesia; it has been preserved in the Hermitage,³ as well as the watercolour drawing depicting it, made in the 1730s by an unknown artist from the Academy of Sciences (cat. no. 844).

Drawings of all 52 objects in the Japanese cabinet mentioned above have been preserved, of which only two, depicting seventeenth-century Iranian daggers, are signed: one by Phillipp Mattarnovy, the other, by Grigory Kachalov (cat. nos. 841, 842). In both works, watercolour wash is confined within clear-cut contours drawn in pen and Indian ink. In Mattarnovy’s drawing gilding has been used. As in the other categories of drawings, here too only a few of the drawings have actually been signed. However, careful study has made it possible to attribute unsigned works to one of the artists who were involved in the ‘paper museum’. In this way, on the basis of stylistic analysis, the

1. *Materialy* 1885-1900, vol. VII, p. 299.

2. *Musei Imperialis Petropolitani* (hereafter referred to as MIP) Vol. II, *pars prima*, St Petersburg 1741, pp. 181-212.

3. The State Hermitage, inv. no. OP-454.

curator of the Hermitage drawings, G.A. Printseva, has assigned eighteen drawings showing Scythian gold objects to Andrey Grekov. One drawing that has been signed is that of an Iranian goblet in the shape of a ram's head. The artist is Grigory Kachalov (cat. no. 881).

In the section 'Catalogus operum artificiosorum et rerum rariorum...' (objects of art and rarities) of the *Kunstkamera* catalogue, *Musei Imperialis Petropolitani Vol. I-II*, there are also waxwork models. A drawing depicting one of these waxwork models, showing a child in a glass case⁴, is inscribed, 'Drawn by Ivan Sokolov on the first day of January, 1738' (cat. no. 558, compare cat. no. 557). Some of the objects from this section of the catalogue were kept in the *Kunstkamera's* Memorial Room, called the 'Emperor's Workshop' (room BB). Here items like pieces of woodwork lathed by either Peter the Great himself or by his associates, e.g. a cup, which held a set of ten smaller beakers are to be found. The drawing depicting it bears the inscription, 'Drawn by Mikhail Makhaev, on the 19th day of April, 1736' (cat. no. 590).

This room also had exhibits that nowadays would be described as ethnographical, viz. objects once belonging to Scythians, Chinese, Indians, and various oriental and northern tribes, including clothes, weapons, utensils, and idols, such as an East-Indian necklace depicted by Andrey Polyakov (cat. no. 739) or a Kalmyk rosary depicted by Grigory Abumov (cat. no. 732). The latter has also painted a water-colour after a 'Swedish bayonet and knife hit by a thunderbolt' (cat. no. 764), as well as a wooden pitcher from the Volga basin (cat. no. 768), a barrel made of cinnamon wood (cat. no. 772) and Tungus baskets depicted on 8 October 1736 (cat. nos. 1054-1057).

Some of the objects have been depicted by two different artists, e.g. Roman lamps by Grigory Kachalov and Grigory Abumov (cat. no. 777-780). Sometimes two artists worked together to depict a group of objects, e.g. Ivan Sokolov and Mikhail Makhaev who, in May 1736, depicted the pottery discovered by a Siberian archaeological expedition (cat. nos. 789-792, 803). All these, archaeological, objects were also to be found in room BB.

The way in which the drawings were signed could vary somewhat. Some of the artists' signatures are placed on the paper in a noticeable way, specifying the date of the execution (day, month, year); other works are signed using monograms, e.g. *P.G.A.* (pinxit Andrey Grekov, cat. no. 888). Ottomar Elliger has proudly signed his brilliant watercolour depicting a cup decorated with precious cameos, given to Peter the Great by the king of Denmark: *O.Elliger Delin[eavit]* (cat. no. 933).

4. Jozien Driessen pointed out that this was not a waxwork model, but a model made from a dry preparation from Peter the Great's collection which he bought from the Amsterdam doctor Frederik Ruysch.

Peter the Great does not seem to have been particularly enthusiastic about ecclesiastical rarities and curiosities which are scarce in the *Kunstkamera* collection, cf. a copy of the miraculous girdle of Mary of Loreto shown in Mikhail Makhaev's watercolour (cat. no. 773). On 10 January 1736, he also depicted a seventeenth-century agate rosary (cat. no. 939), while the drawing after a Byzantine alabaster reliquary is by Andrey Grekov (cat. no. 797). The other ecclesiastical objects of the *Kunstkamera* collection were acquired under tsarina Anne Ioannovna, who reigned from 1730 to 1740.

A significant portion of the Imperial Museum (as the *Kunstkamera* was called later in the 18th century) consisted of military trophies, the earliest ones having been given to it during Peter the Great's reign. These objects too were exhibited in the 'Emperor's Workshop' (room BB). Examples of these types of trophies are the presents which the Duke of Schwerin, who witnessed the death of King Charles XII of Sweden, donated: the King's cup and spurs, and the Duke's gloves, stained with the King's blood from a wound he had received during the battle of Poltava in the Ukraine on 27 June 1709 (cat. nos. 752-755).⁵ After this battle, in which the Swedish army suffered a crushing defeat against the Russians, Charles's baton and hunting knife were donated (cat. nos. 781-782).⁶ During the Persian campaign, which lasted from 1722 to 1723 and after the capture of the city of Derbent on 25 September 1722, Peter the Great sent several military trophies to the *Kunstkamera* like canons and bombards and a silver key to the city (cat. nos. 809-811, 922).⁷ Those objects did not belong to a special memorabilia section, although their political significance, compared to the other curiosities in the museum was clear to everyone concerned. Some of them were kept in room BB, but also in room TT of the *Kunstkamera*, where, as already indicated at the beginning of this article, unique gold and silver objects were exhibited.

The gifts presented to Peter the Great by diplomats and his allies were a testimony of the power and influence of his empire. The precious objects in this group were usually to be found in room TT. Of these gifts, the following in particular must certainly be mentioned: the cup belonging to the King of Denmark, decorated with cameos (see above), an ivory cup given by the Grand Duke of Tuscany, a snuff-box and a ring with a portrait of August II of Poland, or the gift from the Duke of Holstein.⁸ In addition to these, there were all sorts of gifts from members of the family or important people in the Tsar's circle in the collection like the gift from Peter the Great's cousin, who was married to the Duke of Koerland, a principality south of Riga. Other gifts came from Peter's second wife, Empress Catherine I of Russia, from

5. MIP Vol. II, *pars prima*, 1741, pp. 128-129, nos. 23-25.

6. *Ibid.*, p. 131, nos. 37-38.

7. *Ibid.*, p. 198, no. 9; p. 134, nos. 76-77, 80-82.

8. *Ibid.*, p. 199, no. 22; p. 203, no. 1; p. 201, no. 8; p. 90, no. 20; p. 204, no. 7.

9. *Ibid.*, p. 199, no. 14; p. 197, no. 2; p. 87, nos. 31-32; p. 3; p. 156; p. 197, no. 1; p. 103, no. 2. Neverov 1977, p. 44.

10. MIP Vol. II, *pars prima*, 1741, p. 140, no. 151.

11. *Ibid.*, p. 189, no. 30.

12. *Ibid.*, p. 205, no. v; p. 198, nos. 10-11; p. 84, no. 1; p. 126, nos. 66-76.

13. *Ibid.*, p. 113, no. 222f.

14. *Ibid.*, p. 133, no. 65; p. 196, note. Bolgar was the capital city of the Bulgars destroyed by Timoerlan, situated on the left-bank of the river Volga, now in the Russian autonomous Republic of Kazan.

15. B. de Montfaucon, *Supplement au livre de l'antiquité expliquée et représentée en figures*, 5 vols., Paris 1724, vol. 5, pl. 71; MIP Vol. II, *pars prima*, 1741, p. 113, no. 222f. See also the article by Natalya Kopaneva.

16. Kube 1925, nos. 205-206, 184. MIP Vol. II, *pars prima*, 1741, p. 87, nos. 38 and 40; p. 88, no. 45.

General Allart, Generaal J. Botsis, Admiral Fjodor Apraksin, General Izmailov and General Jacob Bruce.⁹

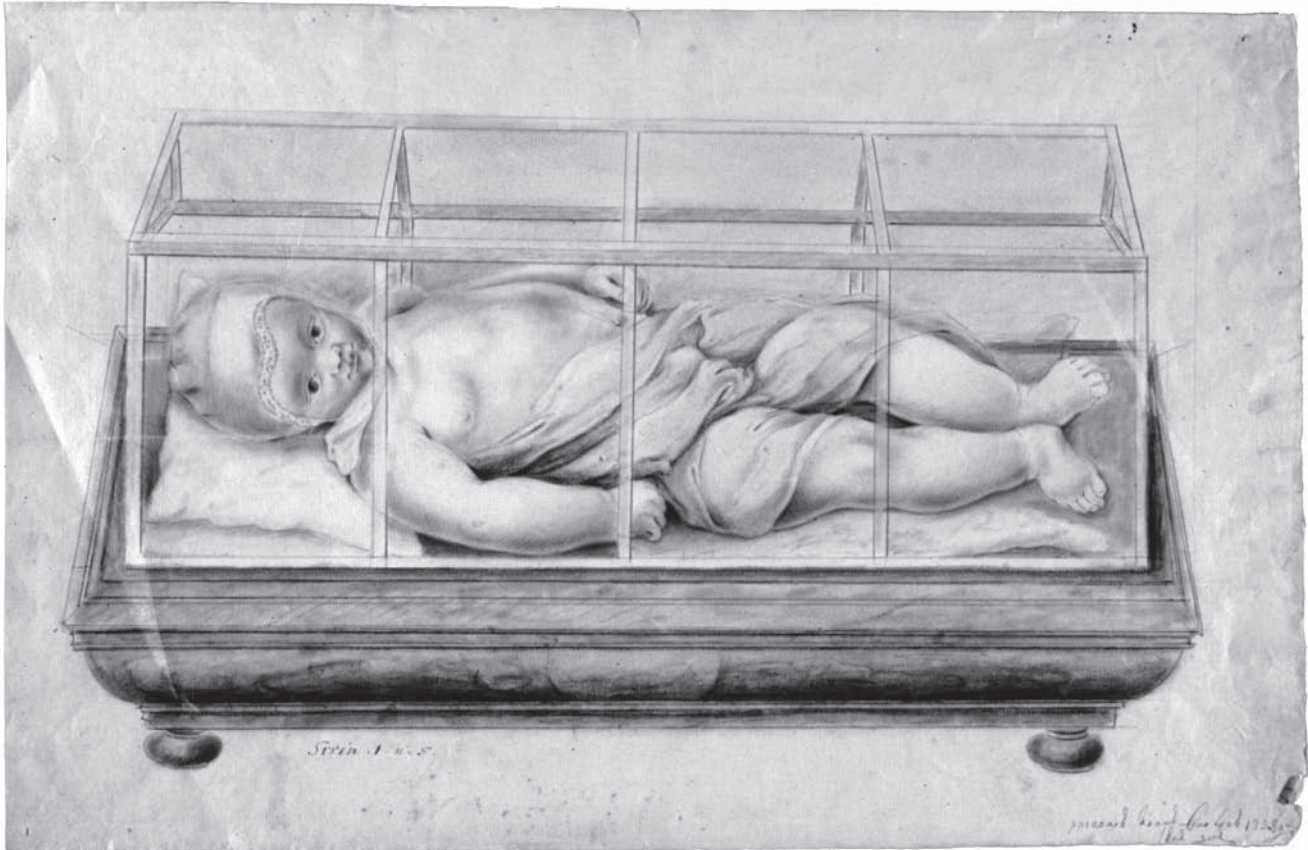
The *Kunstkamera* received important acquisitions from scientific expeditions as well, organised by the Academy of Science in St Petersburg, like the Second Kamchatka Expedition, which took place from 1733-1746. Clothes and objects used in everyday life by the peoples of the north-east regions of the Russian Empire (Samoyeds, Ostyaks, Yakuts, Yukagirs, Koryaks, and Tunguses) were added to the rarities kept in the BB room. (See the contribution by L. Pavlinskaya for the drawings of these objects.)¹⁰ During this expedition other objects were bought or collected. In 1733 Gerhard Müller, the historian who was also a member of the Academy, bought rarities for the *Kunstkamera* in Semipalatinsk, Siberia.¹¹ In addition to this a number of keys to the fortresses captured by the Russians, and rarities brought by pilgrims from the Holy Land were added to the *Kunstkamera* collection.¹²

Finally, it is interesting to note that tsar Peter the Great himself was also active in obtaining objects for the *Kunstkamera* collection. He gave orders for monastery graveyards in Vyborg, captured by the Russians during the Great Northern War (1700-1721) to be opened and the curiosities found there be taken to the *Kunstkamera*.¹³ Other objects came to the *Kunstkamera* from the ruins of the Bolgar archaeological site and the barrows of the Golden Hoard (cat. no. 800).¹⁴ In 1721 a number of finds were brought to St Petersburg from Semipalatinsk, which were immediately made known all over the world by J. Schumacher, librarian to the Tsar who was in Paris.¹⁵ One of Peter's successors, tsarina Anna Ioannovna, took an interest in acquiring objects too. In 1735, the Empress ordered the acquisition of several ivory sculptures: an equestrian statue of August II of Poland and the *Sacrifice of Abraham* group by the German artist Simon Troger (1693/4-1768), a statuette of Juno with the Peacock, attributed to the same artist (cat. no. 573) and a statue of Hercules and Omphala also by a German, Balthazar Permoser (1651-1732).¹⁶

The value of the drawings in this section of the collection of the *Kunstkamera* is high. Used together with archive sources and with the descriptions in the catalogue *Musei Imperialis Petropolitani* Vol. II (1741) they offer a unique opportunity for studying the history of nearly all the objects in this part of the collection. Moreover it has been possible, as it were, to 'retrace' numerous objects from the Hermitage depots on the basis of the drawings.

ICONES OPERUM
ARTIFICIOSORUM
ICONES RERUM
RARIORUM





0558

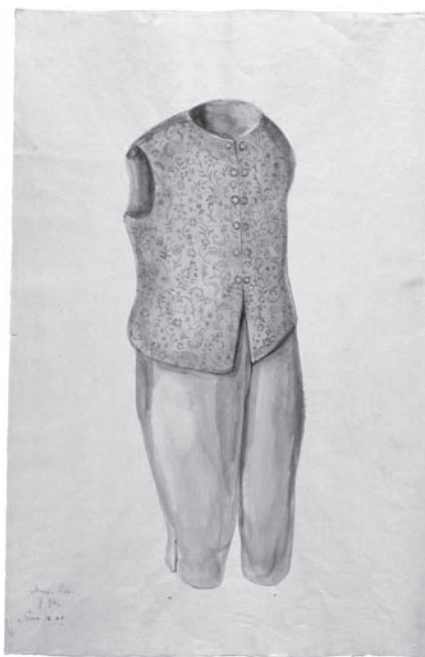
0558

Wax figure of an infant lying in a glass case. It is wearing a bonnet and is wrapped in a cloth. Object from Holland and Russia, 18th c.



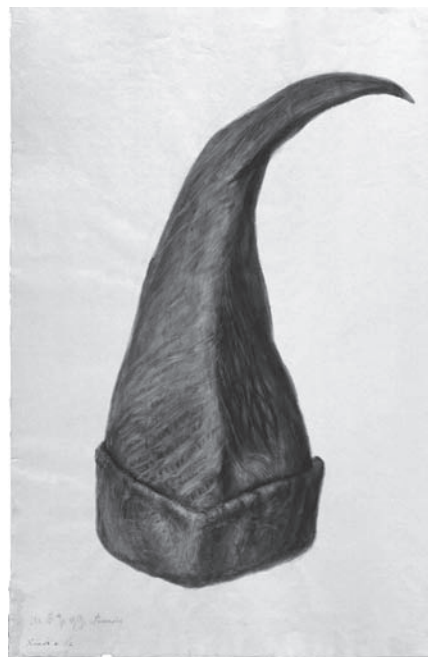
0590

0590
Wooden covered goblet containing a set of beakers, placed one inside the other.



0636

0636
Swimming suit, consisting of a vest and trousers. Object from Western Europe (?), early 18th c.



0637

0637
Pointed cap made of coconut fibres. Object from the West Indies (Dutch colonies), 18th c.



0661



0675

0661
Pair of shoes. Objects from Persia, 18th c.

0675
Aquamanium (washstand) shaped like a centaur. There are two seals on its body depicting animal figures and two other seals in front of it. Objects from Europe, 14th c.



0679

0679
Round bronze sacrificial altar on a high openwork stand. In the middle: two statuettes of wolf-like animals standing on their back legs. The rim is decorated with eight statuettes of fighting animals. Object from Kyrgyzstan (the Scythian or Sarmatian culture), 8th-7th c. BC



0707

0707
Ten earrings made of copper and brass.
Objects from Siberia (?), classical
antiquity.



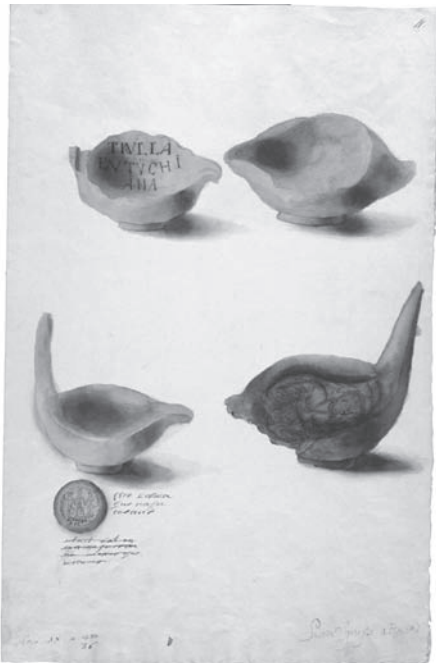
0733

0733
Two rosaries and two crucifixes. Objects
from Asia Minor, 18th c.



0758

0758
Wreath of laurels from the grave of the
heir to the throne, the son of Catherine I
of Russia. Object from St. Petersburg,
18th c.



0779

0779
Four antique clay lamps. Objects from the Roman Empire, 1st-2nd c. AD.



0797

0797
Alabaster tabernacle. Object from Italy, 5th-7th c.



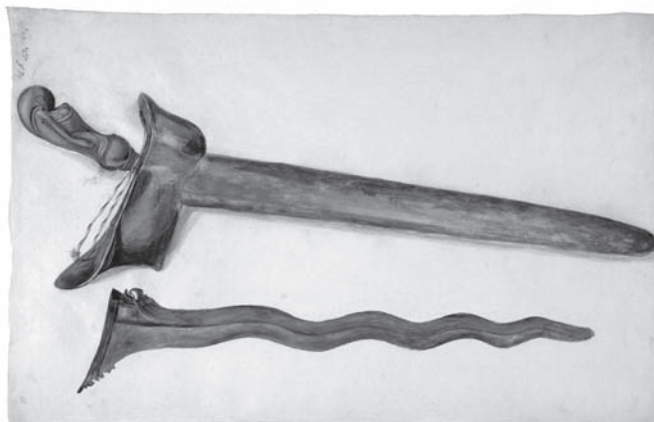
0798

0798
Four bricks with emblems, from Vyborg graves. Objects from Sweden, 18th c.



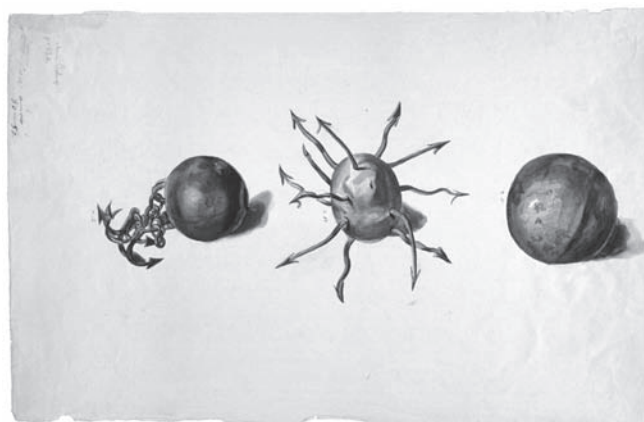
0782

0782
Knife and fork that belonged to King Charles XI of Sweden's cook. The cook was taken prisoner at the battle of Poltava (1709) between Sweden and Russia. Objects from Sweden, 17th-18th c.

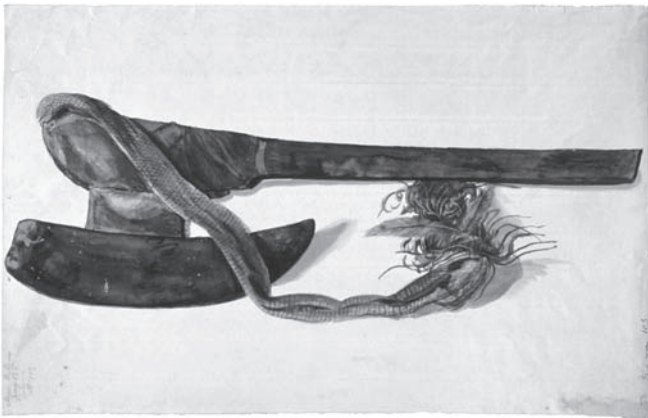


0819

0811
Kris (dagger) in a sheath with the blade depicted separately. Object from the east Indies (Dutch colonies), 17th c.



0819
Three cannon balls. Left: iron cannon ball with anchors. Middle: wooden cannon ball with harpoon heads. Right: copper cannon ball sent to St. Petersburg from Astrakhan on 25 August 1723. Objects from Russia, 18th c.



o823

o823
Axe made of wood and stone. Object
from northern part of European Russia
(Lapps?), early 18th c.

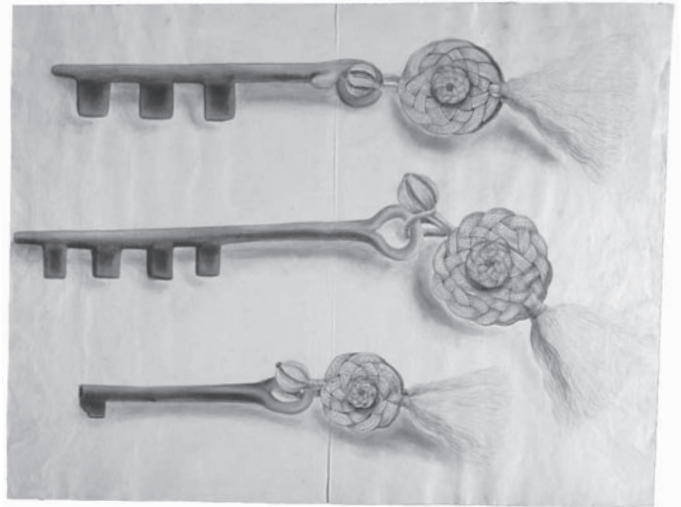


o833

o833
Vest of Peter the Great.



0834



0925

0834
Hat with feathers and a shoe.

SIBERIAN AND VOLGA ARTEFACTS

Larissa R. Pavlinskaya

The drawings of items in the earliest collections of the St Petersburg *Kunstkamera* include depictions of artefacts representing Siberian cultures and those of the Volga basin (70 and 31 sheets respectively). They are now preserved in the Archives of the Academy of Sciences in St Petersburg. A comparison of the drawings with the first printed catalogue of the *Kunstkamera*, *Musei Imperialis Petropolitani Vol. II* (1741),¹ and with the manuscript inventory of the objects that perished in the fire of December 1747 (referred to below as the ‘1748 Inventory’)² leaves no doubt that the drawings do depict the Siberian and Volga collections of the first half of the 18th century. When the catalogue was compiled, the museum had 150 objects from the two regions, of which 116 are depicted in the drawings. It is not clear, however, whether all of the 18th-century drawings have survived to the present day and it is therefore not impossible that drawings were made of the entire collection. According to the ‘1748 Inventory’, all of these artefacts representing the cultures of Siberia and the Volga perished in the fire. This means that the drawings are the only source of information on the daily life and craftsmanship of these peoples in the first half of the 18th century.

The drawings show clothes, headwear, footwear, birch-bark containers, and other objects pertaining to the daily life of the Ugrian peoples of Western Siberia; summer, winter, fishing and hunting clothes of Siberian Samoyeds and Tungus; ritual costumes and tambourines of Siberian shamans; pieces of harness and weapons used by Buryats; coastal and insular Pacific Eskimo, Koryak, and Aleut fishing and hunting tools; festive and everyday clothes of peoples of the Volga basin; and richly embroidered Chuvash and Mari wedding kerchiefs. According to the *Musei Imperialis Petropolitani* catalogue and the ‘1748 Inventory’ of the objects that perished in the fire, items of clothing (such as fur coats, caftans, headwear and footwear) constituted a considerable part of the Siberian and Volga collections of the *Kunstkamera*. It is therefore not surprising that depictions of clothing constitute a major part of the present group of drawings.

Regretfully, the actual number of Siberian and Volga artefacts from the first half of the 18th century in the *Kunstkamera* is unknown because both the catalogue of 1741 and the ‘1748 Inventory’ contain serious mistakes in their cultural identification. For example, a number of objects in the catalogue are listed as belonging to the Sami (Lapp) culture of Northern Europe, while the drawings corresponding to the respective catalogue numbers show Ugric artefacts from Siberia. Identification of an object listed in the catalogue of 1741 or in the ‘1748 Inventory’ is impossible in the absence of a drawing. Even when

1. *Musei Imperialis Petropolitani Vol. II, pars prima*, St Petersburg 1741: Res artificiales.

2. St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPBARAN), f. III, op. I, no. 2247.

the objects are indeed Siberian, these sources may contain mistakes in the more precise identification of objects. For instance, a large number of Ugrian artefacts from Western Siberia have been ascribed to the Tungus culture of the taiga of Eastern Siberia, while Paleo-Asiatic objects of the peoples of the far northeast of Siberia are listed as belonging to the Samoyeds of Western and Central Siberia. The same applies to the identification of the artefacts of the Volga cultures. In this connection, it should be pointed out that at the beginning of the 18th century, a considerable number of Siberian natives lived in small, often related, but not yet clearly differentiated ethnic groups. As a result of complicated ethnogenetic processes (e.g. the arrival of the Russians in Siberia and the inclusion of Siberian natives in the Russian Empire), the ethnic groups have become the Siberian peoples as we know them today. Such terms as 'Samoyed', 'Tungus' etc., introduced by the Russians in the 17th century, reflect linguistic areas and unions rather than peoples. The Samoyeds, for example, included by the end of the 19th century the Enets, Nenets, Nganasan, and Selkups, cultures that even today have a lot in common and, understandably, even more so in the 17th and 18th centuries. Our knowledge of the material culture of Siberian peoples is based on 19th and early 20th-century collections, i.e. collections separated from the drawings by more than a century, a period in which significant cultural changes occurred. All this is an obstacle to attributing the objects depicted in the drawings to a particular culture and is the reason why many of these drawings have a question mark after them in this catalogue. On the other hand, as the drawings date from the first half of the 18th century, contemporary names of peoples have been used, with today's ethnonyms in brackets.

The erroneous ethnological identification of some artefacts in the *Musei Imperialis Petropolitani* catalogue mentioned above suggests that the drawings were produced in the museum, rather than during fieldwork by, for instance, the artists of the Second Kamchatka expedition of 1733-1743. These artists would not have made such mistakes. The fact that the drawings accord with the *Kunstkamera* exhibits confirms this, as do the composition of the drawings and the selection of objects when there are several drawings on one sheet. For example, cat. no. 971 shows items of clothing of Siberian Ugrians and Tungus, separated by thousands of kilometres.

Unfortunately, no 18th-century engravings indicate how the ethnographic collection of the *Kunstkamera* was displayed and therefore what we know about it is based on the catalogue of 1741, the '1748 Inventory' of the objects that perished in the fire, and the extant drawings. The fact that the catalogue firstly numbers the objects by room

and then by the cabinet in which they were stored, and that many of the drawings have an inscription referring to these numbers, is particularly important. It should be noted that 93 of the 101 drawings of the Siberian and Volga collections have such references. When we add this information to the '1748 Inventory' of the 1747 losses, which was probably based on the catalogue, we obtain a fairly good idea of how the collection was displayed during the first half of the 18th century. The Siberian objects were in the gallery on the third floor of the *Kunstkamera* in five cabinets (IX, XII, XIII, XIV, and XXII); the Volga collection was in cabinet X. Cabinet IX, in addition to Siberian implements, had several objects belonging to other cultures, while in cabinet XXII, Siberian implements (cat. nos. 1074, 1075, 1076, and 1078) were displayed next to objects from various cultures, including both European and American. Different cultures were also mixed in the Volga cabinet; in addition to Chuvash, Udmurt, Mordovian, and Mari items, cassocks of various monastic orders, an Ethiopian apron, Finnish purses, as well as three Siberian objects were displayed. The latter were a Nganasan woman's headwear (cat. no. 1040), a Khant pouch (cat. no. 1039), and leg warmers (cat. no. 1033) probably made of fur, which can only tentatively be identified as Siberian.

In cabinet IX, 45 of the 52 objects were from Siberian cultures, but the drawings of only eight of these objects have survived to the present day. There are drawings of all the Siberian and Volga objects in cabinet X. Cabinet XII must have been small, containing only 10 objects, of which seven drawings have survived. It should be noted that the items in this cabinet were surprisingly uniform, consisting mainly of objects from the Baikal culture: four shaman cloaks (two of which there are drawings of), two headdresses, two bridles and a man's inlaid belt (cat. nos. 1042-1047). The drawings depicting the contents of cabinet XII particularly demonstrate the significance of the drawings today, both for the history of museum science (since they, more than the other drawings, reflect the idea of the first Russian museum) and, more generally, for ethnography because they shed new light on Siberian traditional cultures prior to the 18th century. Without these drawings, we would not have a true picture of the objects in this cabinet, for the *Musei Imperialis Petropolitani* catalogue gives no indication of the ethnic origins of the objects or of their connection with shamanism. The drawings suggest that the provenance of the objects is two neighbouring regions, east and west of Lake Baikal, representing the Buryat and the Baikal Tungus cultures. Interestingly, it is in these areas that Professor Gerhard Friedrich Müller and student Stepan Krashenninikov were working during the Second Kamchatka

3. Stepanov 1966.

expedition.³ It does not necessarily follow that the materials under review originate from that expedition, but the coincidence may be sufficient ground for further investigation.

Cabinet XIII also only contains Siberian materials. Depictions of 13 of the 21 objects have survived to the present day. These are shaman tambourines belonging to different cultures and Ugrian birch-bark utensils from Western Siberia. Lastly, cabinet XIV mainly contains depictions of ancestral and natural spirits, listed as 'idols' in the catalogue. Drawings of these objects are few: seven of the 30 items, namely headwear of a Tungus hunter (cat. no. 1063), bird's legs and a bear's paw (cat. nos. 1067, 1068), and two 'idols' (cat. nos. 1064, 1066).

As already mentioned, cabinet X mainly contained objects representing the Volga culture: women's camisoles and caftans, men's outer clothing, belts and embroidered wedding kerchiefs (28 items in total). Depictions of all the items have survived, so that we have a good idea of the Volga collection of the *Kunstkamera* in the 1740s. However, the drawings outnumber the objects listed in the *Musei Imperialis Petropolitani, Vol. II* by nine. These nine drawings show Chuvash and Mari wedding kerchiefs. There is reason to believe, therefore, that the museum acquired some of the objects after the catalogue was published. Indeed, shortly before the fire in 1747, the *Kunstkamera* in all probability acquired a large collection of objects representing Siberian and Volga cultures (over 50 items). The collection was listed in the '1748 Inventory' as a separate entry entitled, 'List of certain objects acquired by the Academy of Sciences after the catalogue had been compiled'. Some of the objects were displayed in the museum cabinets but without inventory numbers, as the catalogue had already been published. This list does indeed include ten Tartar 'tablecloths', displayed in cabinet X, seven of which can probably be identified as the Volga Chuvash and Mari wedding kerchiefs in drawings cat. nos. 1018, 1021, and 1025-1031. This can be deduced from the fact that only seven kerchiefs are listed in the cabinet inventory under nos. 58-62 (drawings cat. nos. 1022, 1023) and 64-66 (drawings cat. nos. 1014-1017), the first two (1014 and 1015) showing pillowcases for wedding pillows, rather than kerchiefs.

Besides, according to the same 'List of certain objects acquired [...]', an 'Ostyak caftan of bird's skin' was exhibited in cabinet X. This must have been the caftan depicted in drawing cat. no. 972, which has no inscriptions giving a cabinet or inventory number. The same applies to seven other drawings (cat. nos. 1079-1082, and 980-981, plus one without a number). These objects also must have been acquired

after the catalogue was published but it is impossible to date the drawings of them; the descriptions of the objects are so brief, they cannot be identified with the help of the acquisitions list of 1747 or the next inventory of the collection, which was compiled by Semyon Kotelnikov in 1770.⁴

A comparison of the drawings and the exhibits shows that the artists of the Academy of Sciences drew most of the Volga and Siberian collections preserved in the *Kunstkamera*. This suggests that the purpose of the drawings was to create a kind of ‘picture catalogue’ of the most valuable exhibits. There is reason to believe that the drawings were made when the objects were acquired. For instance, the Chuvash and Mari wedding kerchiefs (the ‘Tartar table-cloths’ in the ‘List of certain objects acquired [...]’) and probably the Ostyak (Khanty) coat of bird’s skin, acquired in 1747, were drawn prior to the fire of 5 December the same year.

The composition of many of the drawings also leads to the conclusion that the objects are depicted as museum objects, as already suggested above in connection with the numerous incorrect descriptions. Many of the items of clothing have been depicted either from the side or from an angle, while headwear is invariably shown in profile. This suggests that the objects were drawn as they were placed in the cabinets (cf. cat. nos. 979-981, 1013, and 1042-1043 etc.). Some items of clothing are depicted as if they were hanging from a nail (cat. nos. 979, 995). Had the drawings been intended for a scientific publication, this would have been impossible. For example, in the publications by Johann Gottlieb Georgi and Peter Simon Pallas, all the illustrations give a full view of the objects, both from the front and the back,⁵ a principle that is still valid today for scientific illustrations.

The drawings of the Siberian and Volga objects are mostly completely true to the original. One can easily recognize the material of the Siberian fur coats, for example, be it deer hide, wolf or wolverine pelt (cf. cat. nos. 980, 999, 1079). The same applies to other materials, such as birch bark, bast, leather, wood, metal or canvas (see cat. nos. 1058, 1054, 1049, 1050, 1015). This required skill and technical perfection, which many of the artists of the Engraving and Drawing Workshops of the Academy of Sciences had achieved. This is evident in their approach to form and colour, as well as their very unconventional treatment of both. The result is a sort of gallery of works of Siberian and Volga folk arts. The draughtsmen’s talent is especially palpable in the drawings showing richly embroidered clothes from the Volga region. They were able to convey the details and motifs of embroidery, as well as the finest nuances of the rich gamut of colour

4. SPBARAN, f. III, op. I, no. 2243.

5. J.G. Georgi, *Merkwürdigkeiten verschiedener unbekannter Völker des Rüssischen Reichs*, Frankfurt a. M./Leipzig 1777. P.S. Pallas, *Reise durch verschiedene Provinzen des Russischen Reichs*, Frankfurt a. M./Leipzig 1776.

typical of this variety of folk art (see cat. nos. 1009-1011, 1023, 1035).

Not all of the drawings demonstrate such a high level of perfection. A few of these are obviously by apprentices (e.g. cat. nos. 973, 984, 986, 993). However, the majority of the drawings are by experienced draughtsmen. All of the drawings are unsigned, with the exception of two Ugrian birch-bark vessels which are inscribed, 'Drawn by Grigory Abumov, year 1736', and 'on the 20th day of the month of September' (cat. no. 1056) and 'on the 7th day of the month of October' (cat. no. 1057) respectively. Regretfully, the names of the other excellent artists remain unknown.

The significance of the collection of 18th-century drawings in the Archives of the Russian Academy of Sciences cannot be overestimated, first and foremost because they reproduce non-extant 18th-century folk art (from Siberia and the Volga basin). There are no written records of Russian traditional cultures, a circumstance that makes the drawings a unique source for studying the constituent elements of these cultures, such as material, form, decoration, imagery, etc. Moreover, the drawings shed light on the nature and scale of the activities of the Academy of Sciences, reconstructing the early history of the *Kunstkamera*, the first state museum in Russia.

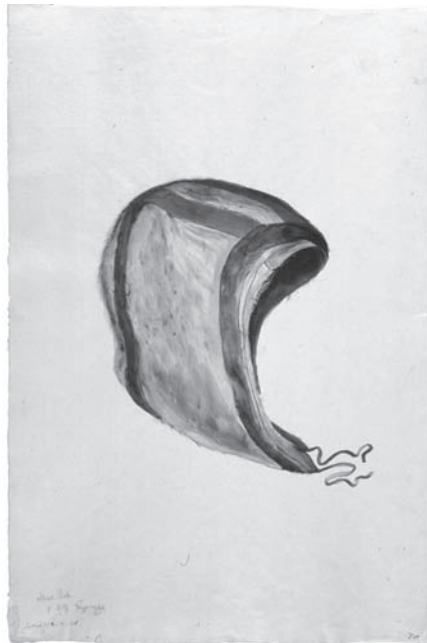
ICONES AD PARATUM
VESTIARIUM





0984

0984
Four items of footwear. Outer left and outer right: winter shoes, made of deer fur. Objects from Siberia (Tungus: Evenk?), early 18th c. Inner left and inner right: legwear, made of deer fur. Objects from Siberia (Northern Samoyeds?), early 18th c.



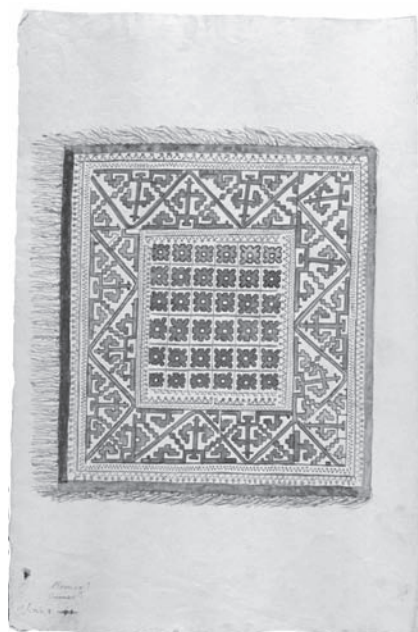
0993

0993
Man's hat made of deer fur and chamois. Object from Eastern Siberia (Tungus: Evenk or Even), 18th c.



0995

0995
Clothes bag, made of deer fur, with a painted decoration. The right side has a stylized depiction of a deer with antlers around it. Object from Western Siberia (Ostyaks: Khants), early 18th c.



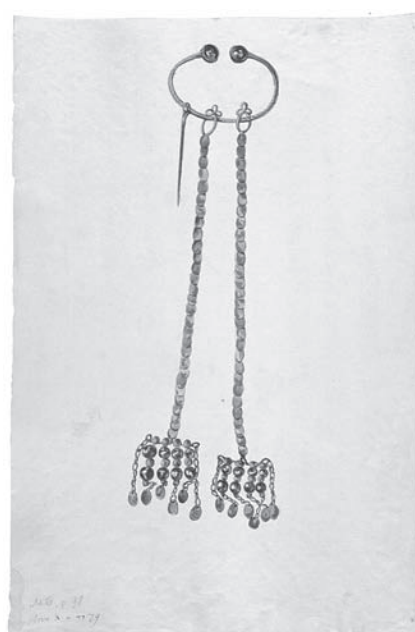
1018

1018
Wedding kerchief. Made of embroidered linen. Object from Middle Volga (Chuvashes or Cheremises: Mari), early 18th c.



1033

1033
Legwear made of fur (?) (possibly fur side in). Objects from Siberia (?), early 18th c.



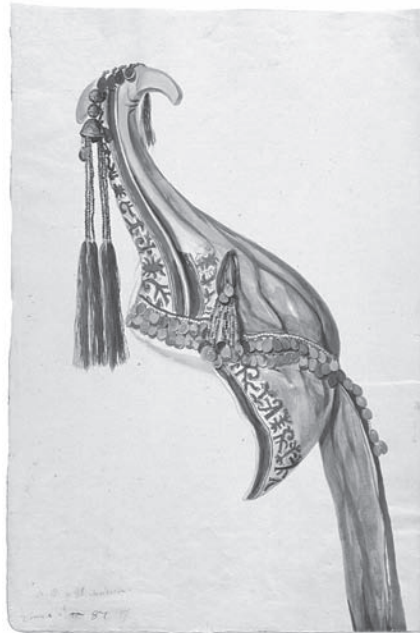
1038

1038
Woman's breast decoration. Made of copper, silver (?) and beads. Object from Middle Volga (Mordovians), early 18th c.



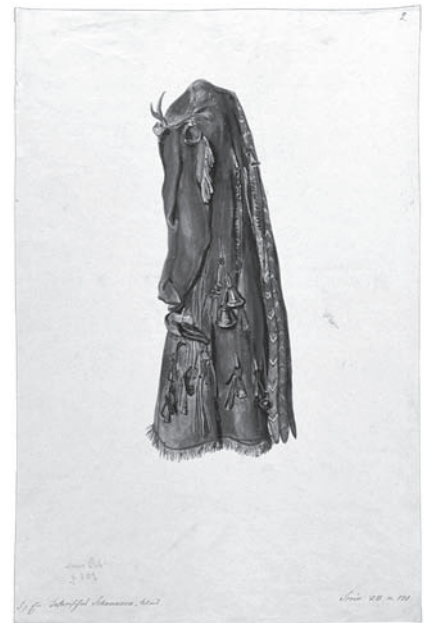
1038

1039
Tobacco pouch. Object from Western Siberia (Ostyaks: Khants or Kets), early 18th c.



1041

1041
Headgear of a bride. Made of birch bark, linen, silver, copper and beads. Object from the Middle Volga Basin (Cheremis: Mari), early 18th c.



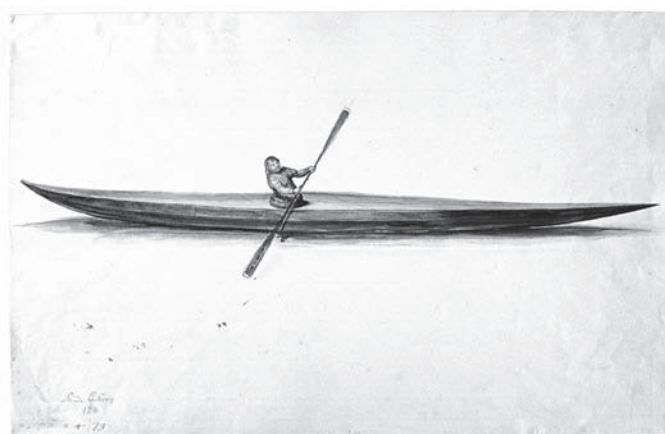
1042

1042
Garment of a 'grand' shaman, with metal and cloth pendants and fur inside. Made of deer hide (?), iron, bronze, cloth and leather. Object from the Eastern Baikal region (Tungus: Evenk), early 18th c.



1068

1068
Two objects for ritual purposes. Left: an eagle's claw. Right: a bear's claws. Objects from Siberia, early 18th c.



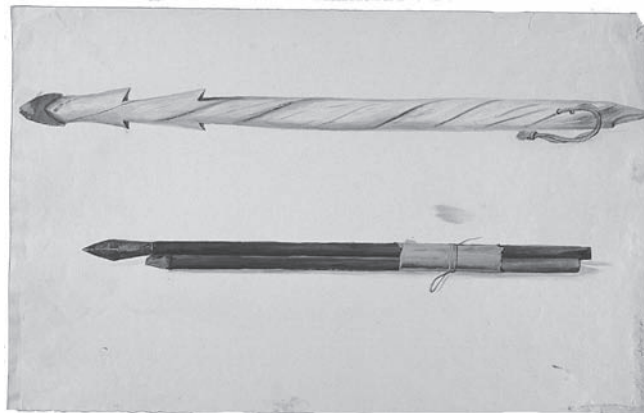
1073

1073
Hunter in a *kayak*, a canoe made of seal or walrus skin stretched over a frame, which was used for hunting sea animals and fishing. Objects from Far North-Eastern Siberia (Eskimos [Inuit] or Chukchi), early 18th c.



1079

1079
Man's hat, made of a wolf's scalp, sable and glutton fur. Object from Eastern Siberia (Yakut), early 18th c.



1076

1076
Two javelins tied together, made of wood and metal, and a spearhead made of bone, stone and leather. Javelins from Japan (?), early 18th century. Spearhead from Far North-Eastern Siberia (Eskimos [Inuit])

1083

Chemise. Object from Middle Volga region (Chuvashes). First half of the 18th c.



1083

1088
Girl's decoration. Object from Middle
Volga region (Chuvash or Eastern Mari),
first half of the 18th c.



1088

CHINESE AND ORIENTAL OBJECTS

Maria L. Menshikova

By around 1730 the quality and size of the *Kunstkamera*'s collection of Chinese and Eastern objects had already attracted attention. This collection was, incidentally, not unique: several people from Peter the Great's circle had also built up collections of their own. The most eye-catching was that of Prince Alexander Menshikov, who had his own cabinet of curiosities, containing a Chinese collection, housed at the Great Palace and Picture House in Oranienbaum. This collection was enlarged during the period that the Grand Duke Petr Fedorovitch (the future tsar Peter III) was living there, namely in the period 1745-61. Another important collector of Chinese objects was the Russian-born general, Jacob Bruce, who was of Scots descent. The latter owned probably one of the most important Chinese collections to be found in Russia in the early eighteenth century. Its size and quality were similar, some parts even better, than that of the *Kunstkamera*. About 150-170 objects of art and curiosities, including a rhinoceros horn, ancient Chinese bronze mirrors and Chinese books were listed among the possessions found after his death in 1735 on his Moscow estate in Glinki. In the years 1792 and 1736 respectively, these collections were added to the *Kunstkamera*.

At the time, Oriental collections were characterised by their wide-ranging fields of interest. The emphasis would focus on a specific area depending on the personal preference of their owner: the cabinets did not only contain exotic objects or works of art, but also antiquities, objects used in everyday life, for religion and beliefs, in science and crafts, and objects that were preserved because of the skilled way in which the natural materials used had been fashioned by man. These 'museums' contained practically no luxurious objects, such as jewellery, porcelain, silk, textiles, carpets, or wall-paper, which in the eighteenth century were used for the decoration of royal palaces and those of the nobility in St Petersburg and Moscow.

Drawings of Chinese and Oriental objects constitute almost an eighth of the corpus of drawings, the *Icones pictae rerum quae in Academiae thesauris insunt*, known to exist at this moment. Nowadays, the largest parts of this collection are preserved in the Archives of the Academy of Science and the Hermitage.¹ Many of the sheets have a number of objects drawn on them, sometimes as many as sixteen at a time. Some objects are depicted twice, for instance they have been drawn shown from the front and the back. In total there are more than 600 objects depicted in the drawings. Some of the drawings show objects that derive from oriental countries other than China, e.g. Japan, India, or Iran.² The extant drawings and the catalogue texts in the *Musei Imperialis Petropolitani Vol. II, pars prima* from 1741

1. The drawings used to be in three boxes labelled *Iconum operum Chinensium* and in two boxes labelled *Iconum adparatus vestiarum*. Nowadays the boxes and the drawings are to be found in the St Petersburg Archives of the Russian Academy of Sciences (hereafter referred to as SPbARAN).
2. 'Oriental objects' are understood to be objects from Eastern countries, including the Near East (for instance Turkey and Iran), Central Asia, Mongolia, the Far East, India and South-east Asia.

(MIP) make a reasonable case for the majority of these objects having been acquired shortly before they were depicted, that is in the second half of the seventeenth or early eighteenth century.

Various groups can be distinguished based on the function of the objects and the materials used. The drawings depict objects made from the most widely divergent materials: carved jade and agalmatolite (soapstone), bronzes, painted ceramic or porcelain figurines, lacquered objects, and those made from wood, ivory and rhinoceros' horn. Nephrite, especially valuable in China, was used in exquisite items for the scholar's studio. Examples of this are: bowls for washing brushes, in the form of a half-peach decorated with twigs or lotus leaves, dragons and other symbolic animals, or 'Chinese mountains' brush-stands. The artists were able to convey the many hues of semi-transparent nephrite. It must have been especially difficult to depict the white-toned nephrite, using grey watercolour or Indian-ink wash. At the time, nephrite was unknown in Europe, therefore in the MIP it is referred to as 'white alabaster' or jade.³ Agalmatolite is designated as 'Indian two-tone stone'. In St Petersburg in the eighteenth century, it used to be called 'soft Chinese two-tone stone' as well, which suggests that this definition applies to soapstone, rather than nephrite, which is one of the hardest minerals. Such definitions were based on visual observation and not on the properties of the materials and can probably be explained by the low standard of mineralogical science and the lack of well-developed mineralogical terminology at the time.

Soapstone was used mainly in the figurines of Buddhist's and Taoist's or 'local' saints, desk decorations, such as brush-pots and brush-stands, and wine vessels and cups. Judging by the drawings, the stone used was of a blood-red colour with violet and yellow coloured dots and veins running through it; some of the objects were decorated with engraving work and gilding. The artists conveyed the hues of the stone in watercolours, using yellow and gold paints for gilding. The bronzes are mostly representations of various deities (referred to as 'idola' in the MIP catalogue), altar objects, archaic forms, boxes, and utensils for writing in Indian ink. These objects, which were widely used in China must have been regarded as objects of value. It should be noted that these objects, which are depicted in groups, such as altar objects or a set for a scholar's studio, an incense-burner, a vase for incense sticks, and a powder box (cat.nos 1219-1222) could, in China, have actually been placed on the same wooden stand.⁴ Many of the drawings also show 'Chinese objects for home use' and 'Chinese clothes', as they are referred to in the MIP.⁵

How did Eastern and Chinese objects end up in the *Kunstkamera*

3. MIP Vol II, *pars prima*, St Petersburg 1741, pp. 94 - 152. On these pages descriptions are to be found of the Chinese and Eastern objects.

4. Even if these objects have been preserved to the present day, they will be spread over various collections.

5. The descriptions in the MIP are not always accurate according to current scientific thinking. Some objects were termed 'Chinese imitations' or *Chinoiserie*. The term 'Tartar' when applied to 'Chinese and Tartar rarities' is in fact a collective term describing all oriental 'barbarian' objects, rather than Mongolian and Tartar productions proper.

collection? After the Treaty of Nertsjinsk in 1689 and especially after 1692, special trading caravans were sent to China.⁶ Their purpose was to bring back to Russia gold, silver, precious stones, silk, tea (which the state had a monopoly on), as well as rarities and curiosities. The last-mentioned articles included gowns, shoes, purses, ropes, pipes and incense-sticks. It was the tsar himself who wrote the lists of objects to be bought in China and other oriental countries. These lists also included objects used by those races that were 'less well-known' in Russia, and which were therefore of interest for the *Kunstkamera* collection, including interior decorations for palaces. In addition, purchases were made by embassies sent to China, such as those headed by Elisar Ides Ysbrant (1692-95) or L. Izmailov (1719-21), as well as by Russian residents in China, e.g. Lorenz Lange.⁷ On the tsar's orders, Oriental rarities were also purchased in Western Europe, like those from Albertus Seba's collection (acquired in 1716). Peter the Great, incidentally, was not the only person to obtain Eastern objects in this way. In addition to general Jacob Bruce, mentioned already, and Prince Alexander Menshikov, there were other enthusiasts building up collections of Chinese and Eastern objects including Peter's court physician Robert Areskine, Andrej Winius and Heinrich Ostermann. Furthermore, they could buy objects for themselves from auctions in St Petersburg. In the eighteenth century it was common practice that objects brought from China, which were not used to furnish the royal palaces, be sold at auction.⁸

The way in which antique objects were obtained does not fit in with the outline just sketched above. These were either discovered by chance or were dug up by 'grave robbers'. In keeping with a regulation stipulated by Peter the Great, archaeological finds from the entire realm had to be taken to the *Kunstkamera*, where they formed the earliest and the most important archaeological museum collection in Russia. The Chinese group included a number of bronze mirrors dated to between 3rd century B.C. and 12th century A.D. (cat.no. 1227-1242) The provenance of many of these is unknown, but it is plausible that some were brought back by expeditions, like that headed by the German doctor Daniel Gottlieb Messerschmidt, who was commissioned from 1720 to 1727 by Peter the Great to travel through large areas of Siberia. His name appears in some drawings in our corpus. His collection was given to the museum in 1727. Other objects could have arrived at the museum due to the efforts of the German historian Gerhard Friedrich Müller, a member of the Academy of Sciences in St Petersburg. From 1733 he was part of the second Kamchatka expedition and he returned to St Petersburg in 1743.

6. In the Treaty of Nertsjinsk both countries agreed to the way the borders between them would run. For many years the Treaty determined the trade, cultural and diplomatic relations between China and Russia.

7. Lorenz Lange (ca. 1690-1749) stayed in Peking as a trade envoy from 1719-1721. He was in charge of the Russian trade caravans.

8. Skachkov 1977.

It is known that the Chinese and Eastern collections in the *Kunstkamera* attracted attention very soon after the museum was opened. The museum appealed to both the residents of St Petersburg and visitors to the capital. We know, for instance, that Empress Anne Ioannovna, who took a great pride in the museum, showed the Chinese collection to the first Chinese embassy which came to St Petersburg on 8 July (Old Style) 1732. This party visited both the *Kunstkamera* and the Library. The Academy of Sciences published a poster inscribed by the members of the embassy in Chinese and Manchu, with an accompanying Russian translation.⁹

9. Skachkov 1977.

Due to the fact that several drawings depicting Chinese and Eastern objects from the *Kunstkamera* are signed, either with the artists' names or initials, we know which artist worked on which part of the corpus. The artists responsible for depicting Chinese rarities were Mikhail Makhaev, Andrey Polyakov, Efim Terentyev, Grigory Abumov, Grigory Kachalov and Yakov Nechaev. The artists mainly used watercolours, rendering faithfully not only the objects they were depicting, but also their shadows, for which they used watercolour (or Indian ink?) wash. To convey the material, volume and light-and-shade, they used the colour white, added glue, and sometimes gold and silver. In some of these drawings preliminary pencil sketches and grids are still visible.

Yakov Nechaev's drawings stand out due to the high quality of his work, faithfully rendering the objects' distinctive features. Interestingly, many of the characters (that is to say Chinese characters) in the drawings are recognisable. Nechaev has reproduced characters as well as the different handwriting used for one and the same character. How was this artist able to do this so naturally? After 1727, Russian students of Chinese began to be sent to the Orthodox mission in China, established in 1715. Later on, some of them worked at the Academy of Science in St Petersburg. Besides these advantages, in 1737-38 a Chinese (?) man called Zhu Ge (Feodor Joga) was teaching Chinese and Manchu in St Petersburg. In the 1730s, during the reign of Anna Ioannovna, the Printing House of the Academy of Sciences had character fonts. Therefore, had he wanted to, it would not have been impossible for Nechaev to study calligraphy, although we have no information on that score. His skill shows in his accurate rendering of numerous small gold characters scattered over two blue-silk gowns, as well as the inscriptions on the silk-framed patterned landscape scrolls, or the books of poetry. He is also responsible for the depictions of small table screens of carved ivory with inscriptions (cat.nos 1259-1260) and for the precise drawings of the bronze mirrors with many

characters or ornaments (cat. nos. 1228-1230, 1233-1235, 1237), which can be identified on the basis of these details. Larger mirrors were depicted on large, uncut sheets of paper drawn to their true scale. Due to the mastery of their execution, many of the unsigned works may be ascribed to Nechaev's hand. Among these are probably four Taoist Chinese deities (cat. nos. 1175-1178) on pedestal thrones made either of bronze or wood, then lacquered and gilded. The details have been conveyed using bright watercolours and gold. As the paper was not big enough to represent the true size of the figures, small pieces of paper have been glued on to the top of the larger sheets.

Mikhail Makhaev's drawings are definitely of the 'classroom' type. In his earliest works, he was not able to render certain Chinese details and therefore repeated one and the same subject, e.g. small figures of boys, crawling, standing or sitting, or he depicted the object from several angles. (cat. nos. 1121-1122, 1155, 1157) But after two months' practice he had a more confident hand.¹⁰

Grigory Abumov's drawings show only those objects which are simple in form, e.g. incense sticks, knives, purses, and ribbons.

It is interesting that some of the drawings mix both Chinese pieces and other, not necessarily oriental, objects, cf. cat. no. 1124, which has three Chinese items and a drawing of a naked, hairy man wearing a hat, probably a wood-goblin. The same objects are shown in other drawings in the collection, viz. in cat. nos. 1123 and 1125 (Chinese), while the figure that has remained unidentified is shown in drawing cat. no. 668, signed by Frans Bernz. The explanation for these repetitions of drawings of objects may be that they were sketches, or improvements on unsuccessful drawings done at an earlier stage. Since paper was expensive, artists used the blank spaces on sheets of paper for their sketches. Therefore some of the sheets contain sketches and 'rejects' side by side with finished drawings made for the catalogue.

On the basis of the study of the drawings, in combination with archival records concerning the history of the museum and the artists' biographies, it would not be wrong to say that the objects under review were drawn between 1736-1739. Some of the sheets bear more precise information – the month and exact date on which the drawing was executed. No drawings are datable to an earlier or later time, and those left undated are similar in style and colouring to the dated ones. These dates clarify some aspects of the history of the *Kunstkamera*. The earliest date found is June 1736, when Makhaev began to depict the 'crawling boys', derived originally from Albertus Seba's collection, which had been preserved in the *Kunstkamera* since 1716. Bruce's, collection, added to the museum by imperial order in 1735-1736, was

10. Many of the figurines have been preserved in the *Kunstkamera*, twenty-four of these being from the Albertus Seba collection.

11. Also belonging to this group are those that were preserved in the care of P.I. Moshkov's, court steward to the tsar. These were mainly Chinese objects made of precious materials. Moshkov was also responsible for the 'Salt office'.

12. SPBARAN, f. 3, op. 1, no. 808 [Elachich archive, 808a]: 'Catalogue given to doctor Elachich going to Peking with a convoy with the object of purchasing similar objects'.

13. One of the mirrors with Chinese inscriptions is illustrated in Nicolaes Witsen, *Noord en Oost Tartarye*, Amsterdam 1692. This book by Witsen was dedicated to Peter I (information kindly supplied by Jozien Driessen).

also to be drawn. Therefore, as early as the spring of 1736, the artists started working on his collection, and only after they had completed this task did they resume work on the objects acquired earlier, including Peter the Great's personal collection, which was transferred to the *Kunstkamera* a few years after his death.¹¹

By the middle of the eighteenth century the value of the documentation proved to be useful. As the result of a disastrous fire in the *Kunstkamera* in 1747 several Chinese objects went up in flames. In 1753 an inventory was drawn up of the Chinese objects that had been lost. Copies of the drawings concerned were added to it to serve as illustrations. This inventory was given to the physician F.L. Elachich, to take to China to be used when purchasing items to replace those that had been lost.¹² If this illustrated inventory is compared to the drawings it can be seen that the copies have been done on a smaller scale than the original drawings. The accompanying catalogue descriptions from the MIP have been translated into Russian. This was the only way the drawings were put to practical, scholarly or archival use in eighteenth-century Russia known to us so far. At the moment there is no knowledge about the way these drawings were used in, for instance, catalogues or scientific publications.¹³

The significance of this collection of drawings cannot be overestimated. The majority of the objects depicted is easily recognisable and can be identified with respect to date, place, and material. It should be noted that, if the dimensions of the object permitted, the artists conveyed all the details fairly accurately, as well as the object's colour and size. Thus the drawings represent an important source of information, allowing us to deduce from them which objects had a place in the Russian collection. Drawings of scrolls (cat. nos. 1264-1266) and books of landscapes, as well as those of a scroll with a hunting scene (cat no. 1267) and the 'butterfly' book with landscapes and poetry (cat. no. 1263) show the earliest Russian acquisitions of Chinese painting. Five of the drawings in the Hermitage museum are after Chinese objects, four of these being clockwork toys (a boat, deities, and a European horseman). The fifth drawing shows a flask of *cloisonné* enamel, and this is the earliest identified example of Chinese *cloisonné* in a European collection. Not all the drawings are equally fail-safe. There were times when the scholars and the artists had insufficient knowledge about an object's use, therefore some of these objects have been depicted upside-down. They were also confused at times about which part belonged to which, thus they depicted details on one object which really belonged to another.

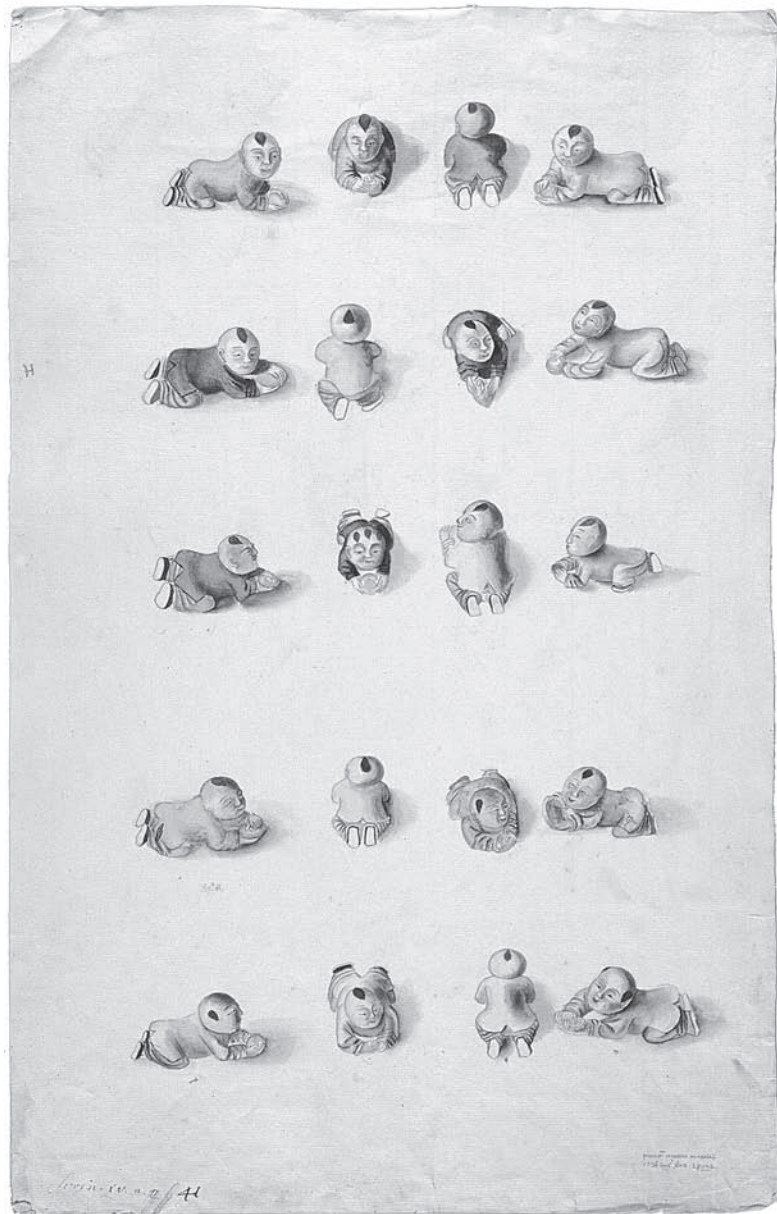
In addition to this, the drawings can help to reconstruct the composition of the *Kunstkamera*'s Chinese collection prior to the 1740s. The majority of the drawings after Chinese objects have inscriptions in the lower left-hand corner, indicating the cabinet (*scrinium*), the place in the showcase and the number in the MIP. The crossed through numbers indicate the place in the cupboard, the new numbers correspond to the catalogue numbers in the MIP.¹⁴ Some of the inscriptions indicate that the Chinese collections were kept in cabinets in the 'BB room' on the second storey gallery, which looked out over the lower-level 'LL room', where the birds and quadrupeds from the *Kunstkamera* collection were on show. Floor plans and fittings and fixtures in these rooms were included in the 1741 guide to the *Kunstkamera* and the Academy of Science. The illustrations in this guide give us an insight into the way in which the Chinese and Eastern collections were exhibited in the *Kunstkamera* period. This guide includes accurate floor plans and fittings and fixtures of rooms in the *Kunstkamera* drawn by, among others, Grigory Kachalov.¹⁵ By making use of archival records relating to the drawings and the extant objects they depict, it is possible to track the history of the collection and its formation, and identify the objects once belonging to Peter the Great or his contemporaries. The drawings help to establish which objects had been in the museum before the fire and were subsequently destroyed. They can also corroborate the scholars' conclusions concerning the history of the *Kunstkamera*'s Chinese collections or help in the identification of the objects which nowadays belong to the *Kunstkamera* itself, or to other museums to which they have found their way after leaving the *Kunstkamera*. As a result of numerous collection transfers from museum to museum, which took place in the 18th-20th centuries, objects may have been scattered over various collections. As the drawings are either accurate depictions of several objects shown on one and the same sheet, or several parts of one and the same object on a sheet, they may help us to reconstruct or even to restore the original appearance of these objects, either extant or lost, as well as providing further clarification of their dates.

14. Almost all of the drawings had paper labels in the lower left-hand corner, but only traces of these have been preserved.

15. *Palaty Sankt-Peterburgskoy Imperatorskoy Akademii nauk biblioteki i Kunstkamery* [Chambers of the Library and the Kunstkammer of the St Petersburg Imperial Academy of Sciences], St Petersburg 1741/1744.

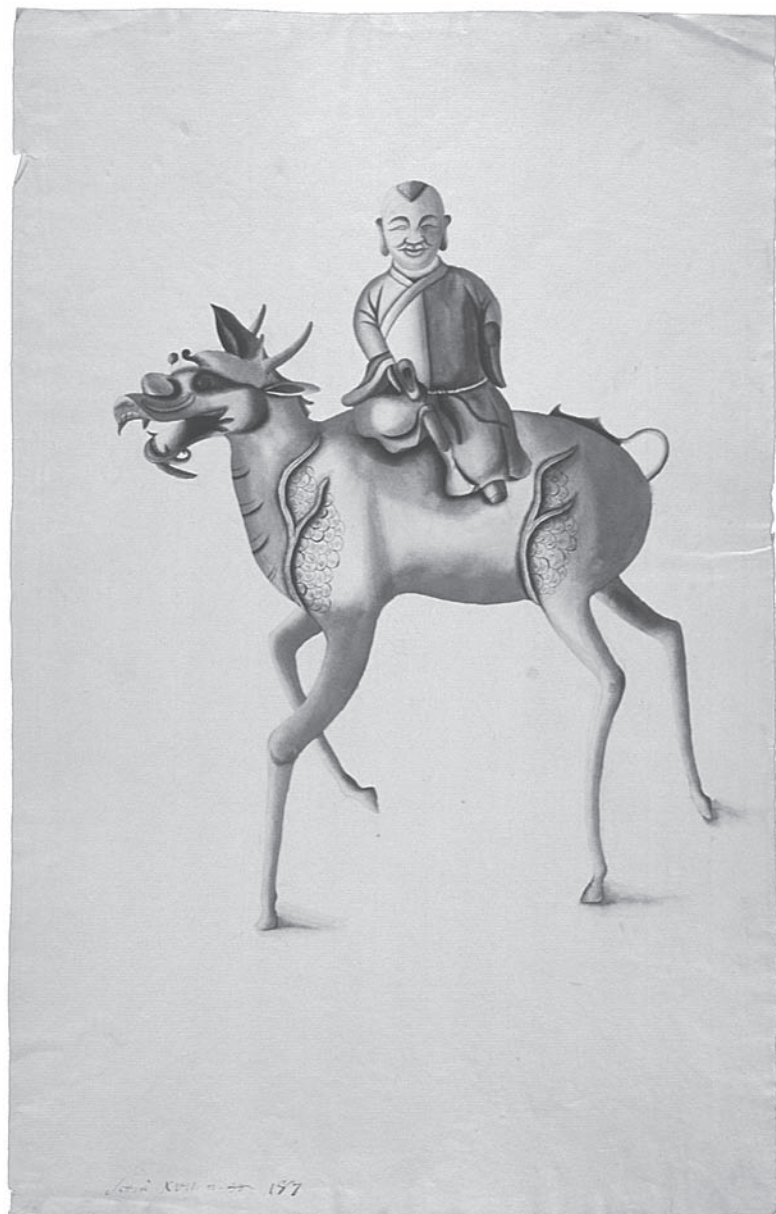
ICONES OPERUM
CHINENSIIUM





1122

1122
Twenty figures, in five horizontal rows, of boys crawling. Made of earthenware or stone, painted. Objects from China, late 17th c.



1187

1187

Bronze, gilded incense-burner with a removable lid in the shape of a boy on a *qilin*. The boy's left hand is missing. Object from China, 17th c.



1124

1124

Four objects. Upper left: a round brown wooden box with a carved rosette on the lid. Object from China, 17th-early 18th c. Upper right: a carved bamboo brush rest in the shape of a mountain with a small animal, possibly a fox. Lower left: a bamboo cup with a carved flower. Objects from China, early 18th c. Lower right: a standing figure of a sylvan ghost (?) with a hairy body and a beard, wearing a hat. Non-Chinese.



1142

1142

A group of statuettes on a horseshoe-shaped stand. The group comprises a mule or donkey on the left; a seated god (of cattle?) as a young man in an official's yellow robe in the centre; and two women on the right, standing, dressed in yellow robes over wide trousers. In front of the god there is an incense-burner on a stand. Made of metal and possibly ceramic, painted. Objects from China, early 18th c.



1194

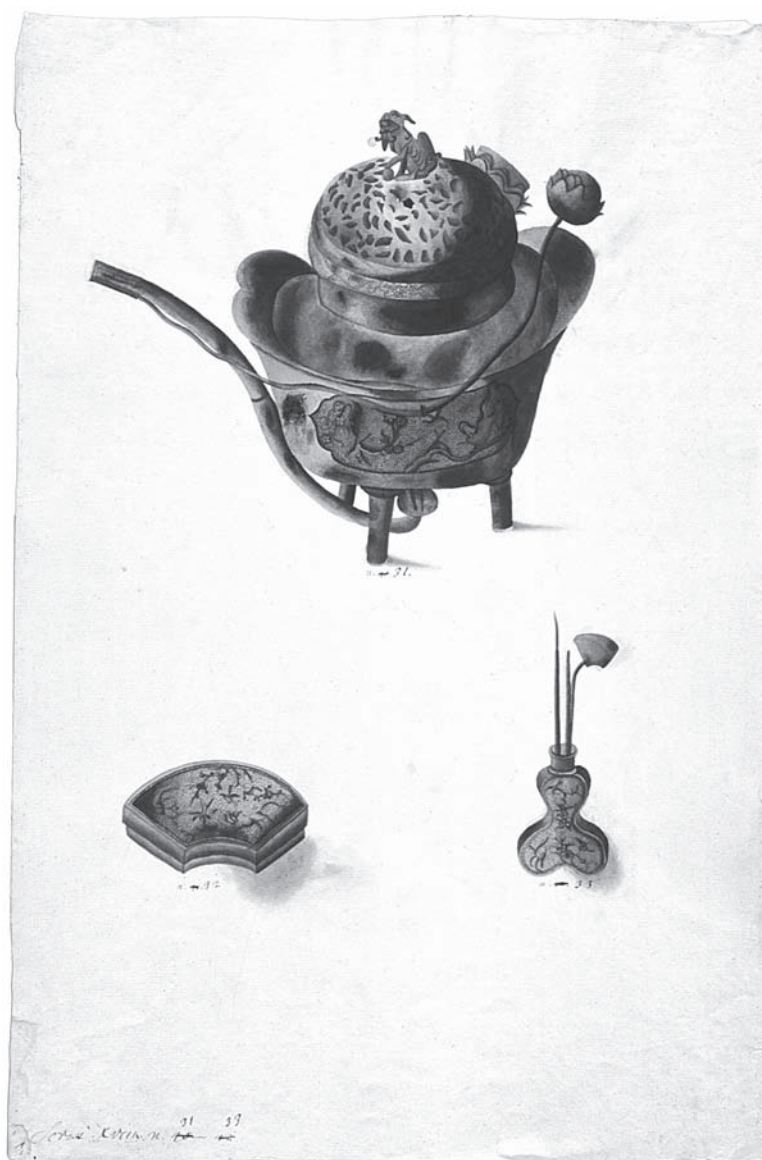
1194

Bronze altar-piece in the shape of a crane, on a stand. Its head is turned to the left. Object from China, 17th-early 18th c.



1213

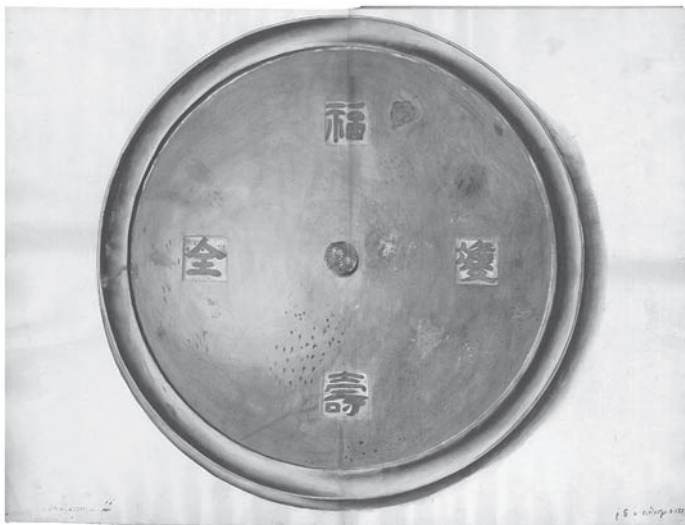
1213
Bronze vessel of the 'gu' type, drawn upside down. Object from China, 17th c.



1219

1219
Set of three items for burning incense. Upper centre: incense-burner in the shape of a leaf-cup on three legs. The lid is perforated and crowned with a knob in the shape of a lion with a ball. The handles are shaped like a lotus stem and two flower buds. The body is decorated with cartouches with reliefs of flower ornaments. Lower left: box with a cover in the shape of an open fan. The lid is decorated with a

relief ornament of birds flying with branches in the background, edged by a small rope-like rim. Lower right: vase shaped like a flat double gourd, decorated with a relief ornament depicting blossom and with a rope-like rim. Inside the vase are two sticks and a spatula for incense powder or ashes. Made of gilded silver (?) or copper (?). Objects from China, 17th c.



1228

1228
Large round bronze mirror-amulet with a knob in the centre and a concave outer rim. It has four symmetrically arranged cartouches with characters. Possibly gilded, spots of green patina. Object from China, Ming dynasty (1368-1644), 16th-17th c.



1245

1243
Musical stone made of slate on a cord, with a hammer below it. Objects from China, late 17th-early 18th c.



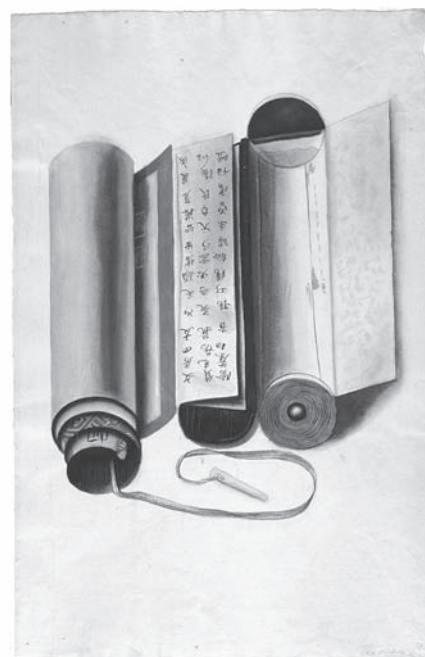
1255

1255
Teapot cover made of pressed and painted leather. Object from Mongolia (?), early 18th c. Dimensions: 22 x 20 cm.



1260

1260
Carved ivory table screen on a stand with a depiction of a grasshopper on a branch with thorns and chrysanthemums. The frame is an openwork flower scroll and the stand has an ornament of carved flower heads and scrolls. The side columns depict seated lions. Object from China, late 17th-early 18th c.



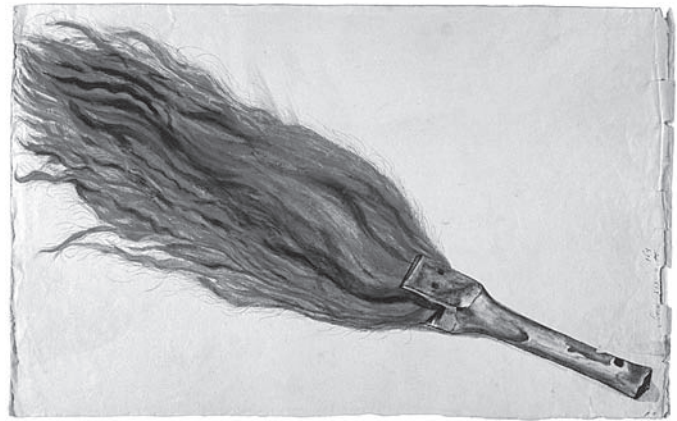
1264

1264
Scroll (with a painting?) and a box, depicted upside down. Object from China, 17th c.



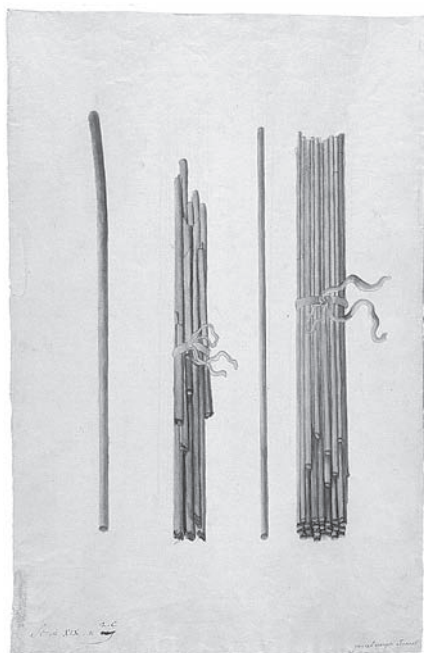
1270

1270
Fan in the shape of a leaf. The fan depicts a lady on the left and on the right, a slave kneeling and a bird on a post. The handle is decorated with flower scrolls. Possibly this object was used as a face fire screen. Object from Russia or Western Europe, chinoiserie, 18th c.



1281

1281
Flywhisk made of horse hair, with a bamboo handle. Object from China, early 18th c.



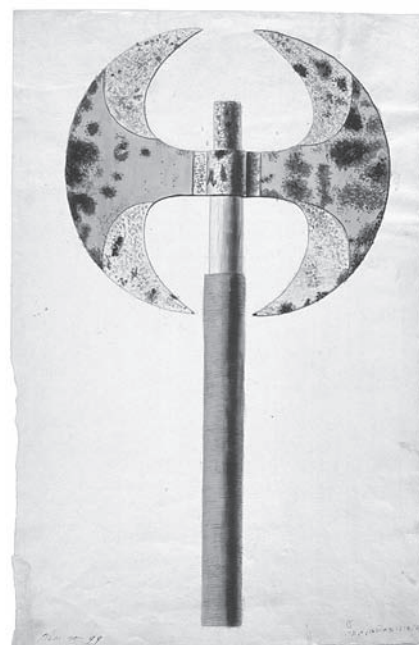
1298

1298
Two fire sticks and two bundles of fire sticks. Objects from China.



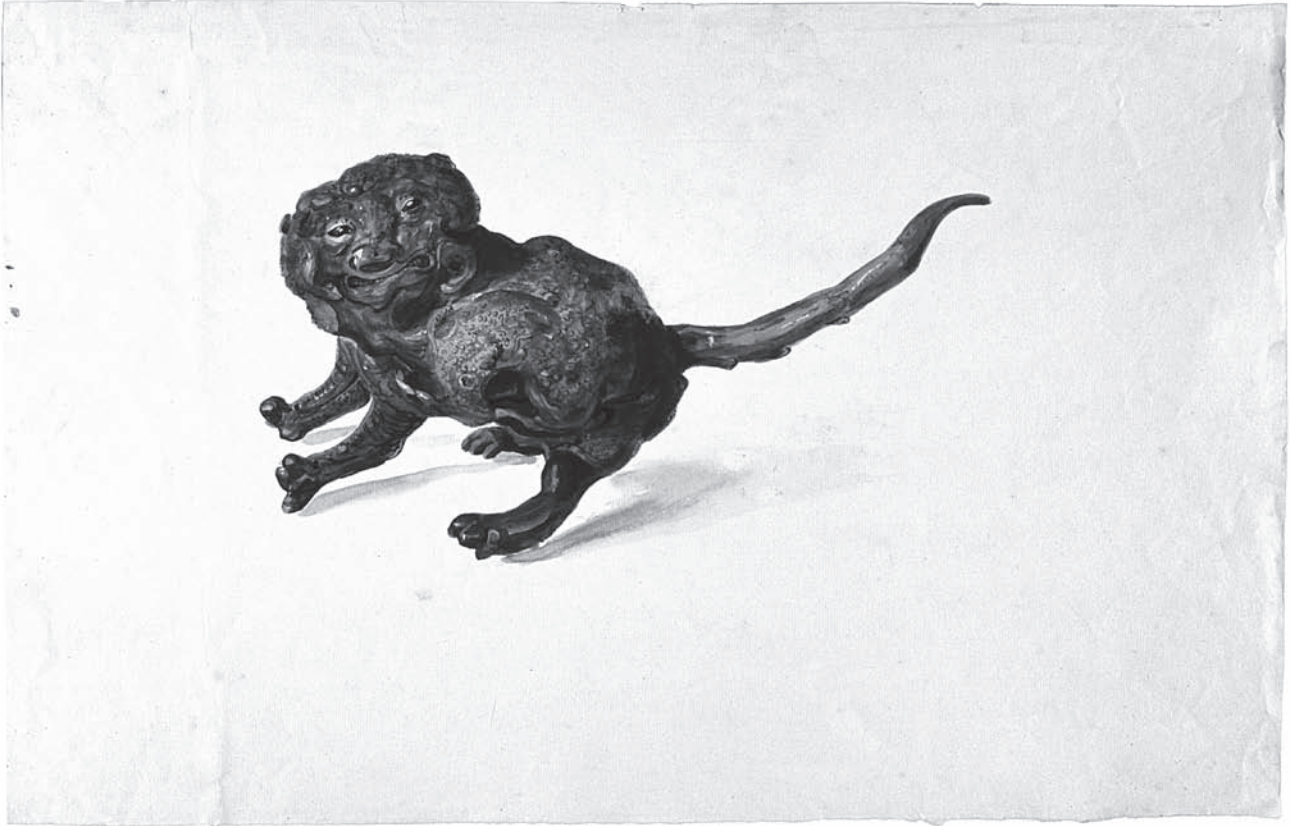
1309

1309
A decorated box for sweets, with a lid. A peony bush with flowers and a pair of flying kingfishers are depicted in the centre. There are five cartouches with dragons, lions and a dragon horse on the sides. Made of black and coloured painted lacquerware, the diaper ornament is inlaid with mother-of-pearl. Object from China, c. 1700.



1315

1315
Iron double axe with gilding.



1327

1327
Statuette of a lion with a long tail. Made
of gnarled wood. Object from China,
17th-early 18th c.



1331

1331
Tree root, possibly the base for a figure of an immortal. Object from China, 17th c.



1332

1332
Robe seen from the left side made of blue silk with white silk lining, with splits at the side and the back. It is decorated all over with small gold characters and a large stylized *shou* character in the middle of the back. Object from China, 17th c.

ANCIENT COINS

Oleg Ya. Neverov

Nowadays the drawings of antique coins and medals are a sizeable part of the ‘paper museum’. Six hundred and ninety-eight sheets have been preserved with representations of more than 7,000 items. The sheets are in five original, leather-bound gold-stamped boxes inscribed *Icones nummorum*, which were acquired by the Hermitage in September 1894.¹ The drawings are neither signed nor dated. It is unknown whether they were all done by the same artist, but after having taken part in the Orenburg expedition in 1745, Ivan Shereshperov was reported to have been appointed to the position of ‘draughtsman of medals under Councillor Schlatter’.²

The sheets all have the same dimensions (453 x 287 mm). Some coins are depicted on their own, on a large sheet of paper all to themselves, others sharing a sheet with twenty or more drawings. Black, green and yellow watercolours have been used to render silver, copper, and gold respectively. In the text of *Musei Imperialis Petropolitani Vol. II* signs of the zodiac are also used to indicate the material used: the solar sign ☉ for gold, Venus ♀ for copper, while silver has no designation because the majority of the items are made of this material.³ The *Kunstkamera* collection of coins was not the only numismatic collection to be found in Russia in the first half of the eighteenth century. Peter the Great had his own small collection of Roman and Greek coins given to him by rear admiral I. F. Botsis. In St Petersburg, the coin collectors were the botanist Johann Christian Buxbaum, the astronomist Joseph Nicolas Delisle, the historian Gottlieb Siegfried Bayer, and Count Jakob Bruce. Also well-known were Prince Dmitry M. Golitsyn’s, Count Heinrich Ostermann’s, and Commissar P. Krekshin’s numismatic cabinets.⁴ Later on, some of these collections were acquired by the *Kunstkamera*.

The core of the numismatic division of the Imperial Museum of the Academy of Sciences was Johann Lüders’ collection, purchased in 1721 in Hamburg by Johann Daniel Schumacher, librarian to the Tsar. More precisely, he bought up the major part of the collection comprising gold and silver coins that had been pawned. In 1738, under Anna Ioannovna the missing bronze coins were added to it. Lüders’ cabinet cost 5,000 thalers, which was not expensive. According to Schumacher, ‘Christina of Sweden had offered 80,000 efimki for it, for indeed, the cabinet was among the most glorious in Germany’.⁵ Part of the collection had already been described in a seventeenth-century publication.⁶

By the time *Musei Imperialis Petropolitani* (MIP) Vol. II was published, in 1745, the *Kunstkamera* collection of ancient coins had grown to over 7,000 items. Starting in the sixteenth century, numis-

1. See Galina Printseva elsewhere in this publication on the fortunes of these boxes.

2. *Materialy* 1885-1900, vol. VII, pp. 285, 685.

3. MIP Vol. II, pars prima, St Petersburg 1745, p. 215 ‘Notandum’.

4. Neverov 1977, p. 43f.

5. Pekarsky 1862, vol. I, p. 533. Seeing as 1 efimki is in principle equal to 1 thaler, Christina must have bid 16 times as much (with thanks to Paul Beliën for this information). Did Schumacher tell this story to emphasize just how much the Russian tsar was preferred as buyer?

6. Claude Chifflet and Rudolfo Capello, *De antique nummo et praecipue romano liber posthumus, continens cheiragogiam accuratissimam tertia ed. ... auctus ea fini ut ... Nummophylacium illud luederianum hamburgense ... Claude Chifflet prodit, accurate Rudolfo Capello*, Hamburg 1678-1679. This catalogue from the Lüders’ collection went with the collection to St Petersburg (Neverov 2001, p. 76). Part of the manuscript catalogue of the collection, made by M. Vogel, is preserved at the Hermitage and the Archives of the Academy of Sciences (St Petersburg Archives of the Russian Academy of Sciences (SPBARAN), f. III, op. 4, nos. 144-148; Library of the Academy of Sciences, collection of foreign manuscripts, nos. 293-295). *Materialy* 1885-1900, vol. VII, pp. 285, 605.

matics of Classical Antiquity had gradually become a well-developed branch of scholarship in western Europe, therefore St Petersburg numismatists could adopt the established classification of ancient coins. The basis of this classification was works like *De re numaria antiqua* by the Dutch engraver Hubert Goltzius (1526-1583), *Numismata imperatorum Romanorum praestantiora* by the French scholar Jean Vaillante (1632-1706) or *Thesaurus Brandenburgicus selectus* by the antiquarian Lorenz Beger (1653-1705). The section of MIP Vol. II devoted to ancient coins presents a systematic arrangement of the pieces, starting with ‘ancient gold, silver and copper coins of Roman families’ (*Familiae Romanae*). ‘Roman families’ were the magistrates who were empowered to stamp the coins with their names and respective emblems. They were elected for the office, called the monetary triumvir, from among the noblest families in the Republic. The figures in the MIP description designate the size (*magnitudo*) of the piece; letter A designates the reverse of the coin, after which follows a description of what is depicted.

As indicated above, a sizeable collection of drawings depicting these coins and medals has been preserved: six hundred and ninety-eight sheets with representations of over 7,000 coins and medals.

Sheet 1 (cat. no. 1336) shows the oldest Roman coins, asses (Lat. sg. as). Then follow the Roman families arranged alphabetically, from Aburia (Rubria in the text) to Volteia (cat. nos. 1337-1466).

After a few miscellaneous coins, the following section shows coins of the Roman emperors (arranged chronologically) from Julius Caesar to John Comnenus (cat. nos. 1471-1884). Beside Heraclius’s gold coin, there is a sixteenth century imitation of a medallion of this Byzantine emperor by Giovanni Cavino (?)⁷

Next are coins of kings and outstanding individuals (also arranged alphabetically); however, many of these are products of the imagination, e.g. coins showing Alcibiades, Aristotle, Dido, Helena, Ovid, Virgil, and Sappho (cat. nos. 1888-1944).

The last section (cat. nos. 1945-1995) is devoted to coins dedicated to ancient cities and peoples, where beside the real coins of Greek and Italian cities and colonies, one can see, for example, the so called ‘Spinthrian token’ allegedly from Lesbos (cat. no. 1969).

Depictions of fourteen contemporary medallions with portraits of Roman emperors have erroneously been placed next to the depictions of ancient coins. Two of these are signed, ‘drawn by Andrey Polyakov on the sixth day of September 1736’. Although the depictions make no mention of the emperors’ names, Caracalla and his brother Geta are easily recognisable. The drawings must be from the seventeenth and

7. Grasser 1979, p.18.

eighteenth century medallion series showing Tiberius, Nero, Vitellius, Galba, Antoninus Pius, Marcus Aurelius, Lucius Verus Pescenius Niger (twice), Didius Julianus, Septimius Severus (twice), Helvius Pertinax, Caracalla, and Geta. Such medallions were kept in the O room of the Academy building, devoted to ‘Works of art, statues, and wax, copper, and cast iron low-reliefs’.⁸

Studies and publications on the coins in the *Kunstkamera*’s coin collection have been carried out by both academics and collectors from St Petersburg. The Master of the Ordnance, General Jacob Bruce, for example, was studying Bactrian coins and his paper was presented at a session of the Academy of Sciences by the historian Gottlieb Siegfried Bayer, ‘academician of Greek and Roman antiquities’.⁹ According to I.G. Spasskiy, this ‘Memoir on Bactrian Coins’ was the first numismatic work in Russia.¹⁰ It was only after Bruce’s death that an outstanding coin of King Eucratides (200–150 B.C.) was written about.¹¹ Bayer also published studies on over thirty coins from Johann Christian Buxbaum’s collection,¹² among them the coins of Edessa and Antioch which Buxbaum himself discovered in Asia Minor. Those bearing depictions of Alexander, Lysimachus, Seleucus, Antiochus, Ptolemy I, Philip V, Mithridates V, and other Hellenistic kings make up entire series of portraits.

The drawings which have come down to us in the five boxes were probably made to be engraved as illustrations in the publications mentioned above. It should be noted that the *Kunstkamera*’s archaeological and numismatic collections rivalled, and in some respects even surpassed, similar collections in western Europe, which was confirmed by those who visited St Petersburg in the 1720s, e.g. Friedrich Christian Weber, Friedrich Wilhelm von Bergholtz, or Henning Friedrich Bassevich. According to them, in archaeology and numismatics the *Kunstkamera* was ‘equal to, or even ahead of, all other museums’.¹³

8. MIP Vol. II, *pars prima*, St Petersburg 1745, p. 77, nos. 72–83. As yet, we have not included the drawings concerned in our corpus. According to N.V. Kalyazina, such depictions could have been used as models for the interior decoration of the *Kunstkamera* (Kalyazina 1998, pp. 62, 69).

9. *Materialy* 1885–1900, vol. I, p. 495.

10. Spasskiy 1977, p. 61.

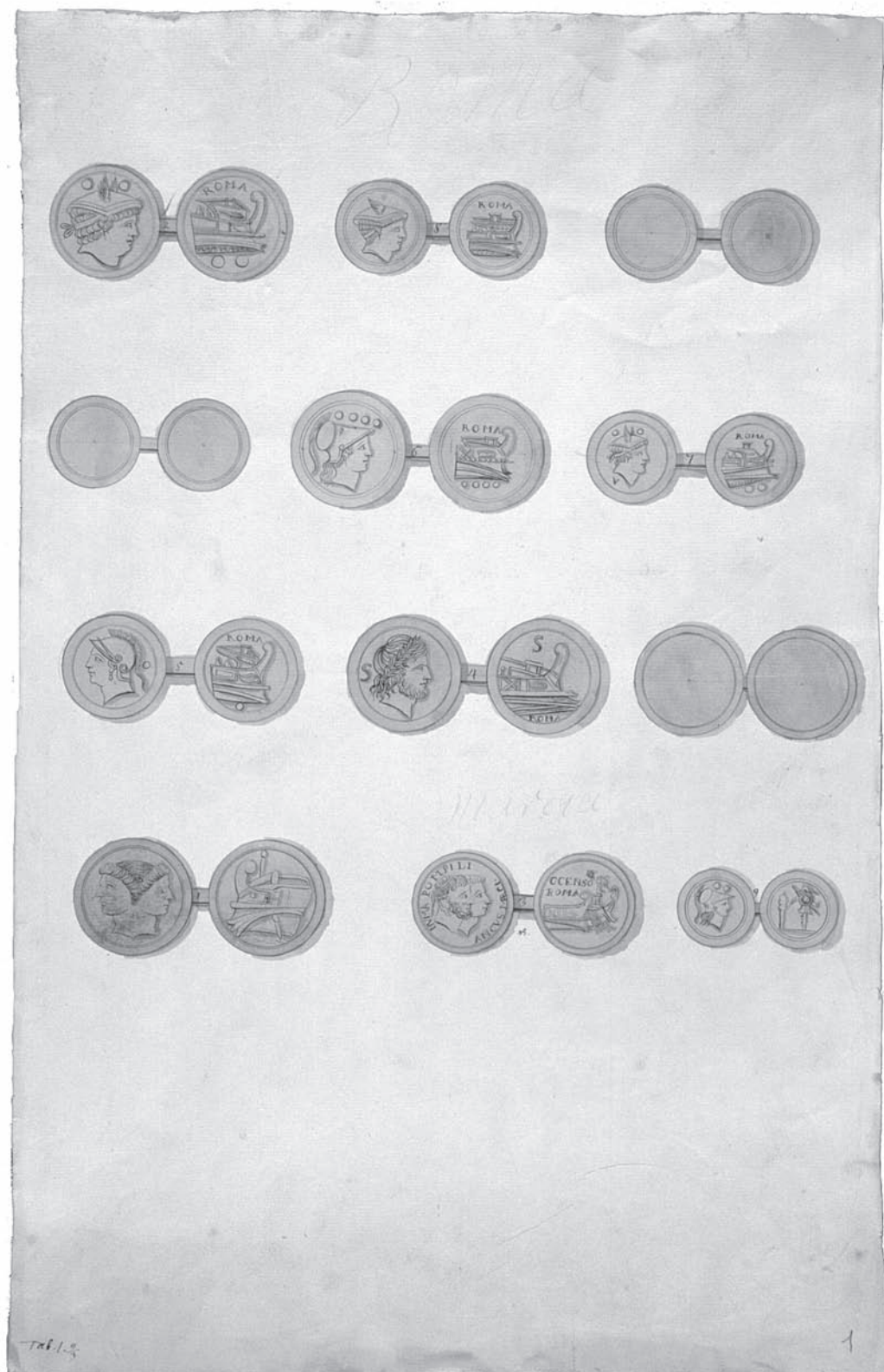
11. T.S. Bayerus, *Historia Regni Graecorum Bactriani*, St Petersburg 1738, p. 99, tab. I.

12. T.S. Bayerus, *Opuscula ad historiam antiquam [...] et rem numariam spectantia*, Halle 1770, *passim*.

13. Fanderbeck 1842, pp. 1, 22.

ICONES NUMMORUM



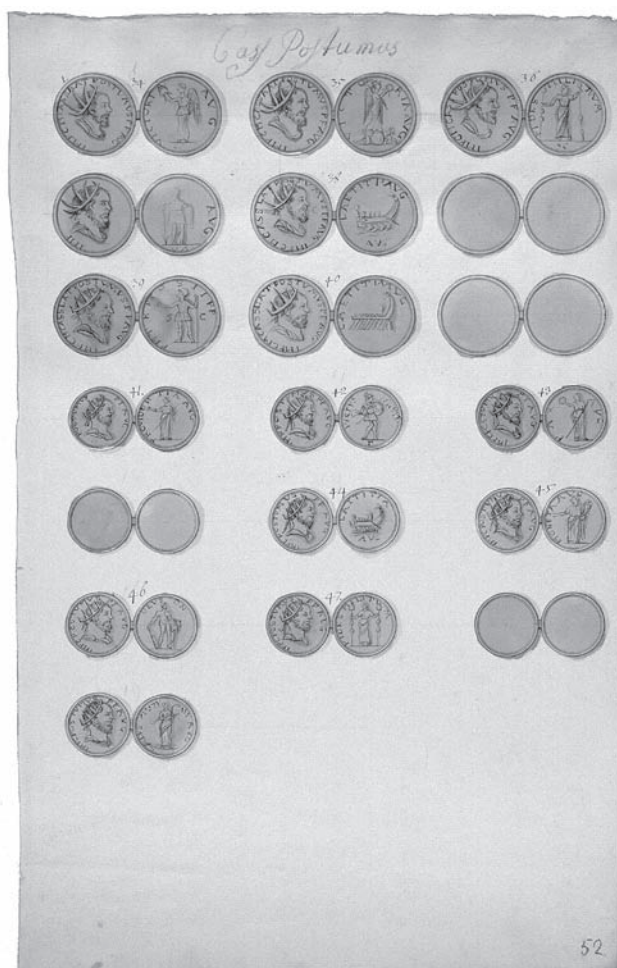


1336
Nine Roman Republican coins and three
empty fields.



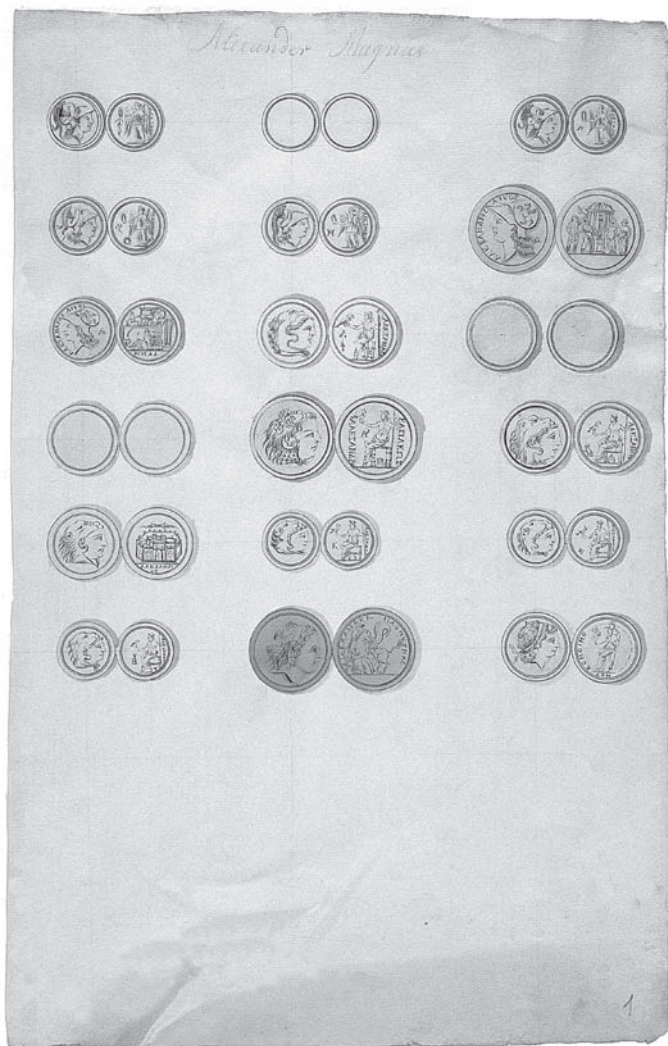
1471

1471
Coin of the Emperor Julius Caesar
(Roman Empire).



1758

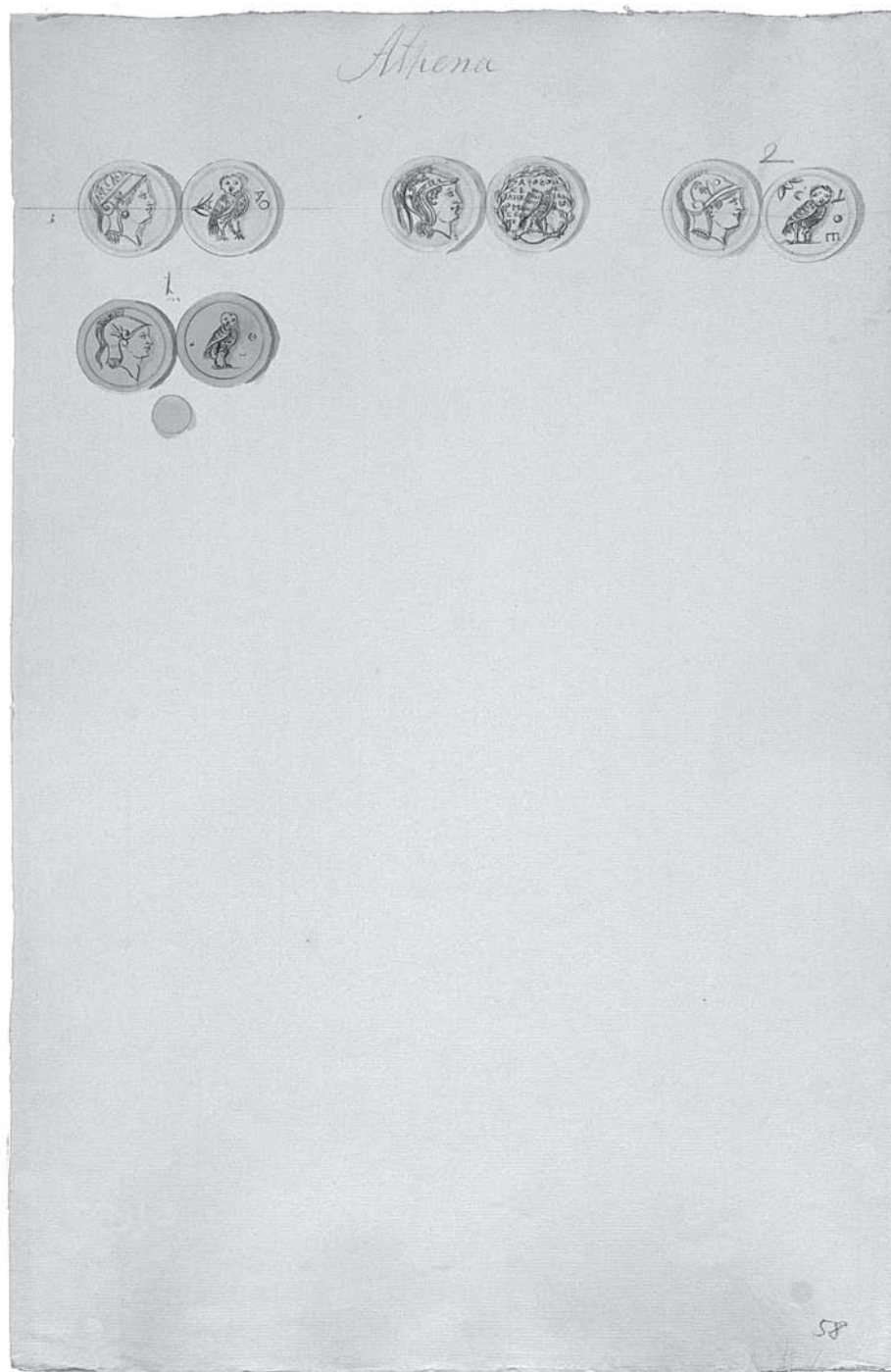
1758
Fourteen coins of the Emperor Postumus
(Roman Empire) and four empty fields.



1888

1888
Fifteen coins of Alexander the Great and
three empty fields.

1950
Four coins of the city of Athens (Attica).



MEDALS

Evgenya S. Shuchukina

The library of the Numismatic Cabinet of the Hermitage keeps 26 odd sheets with drawings of medals dating from the time of Peter the Great. The drawings are closely related to the catalogue of the *Kunst-kamera, Musei Imperialis Petropolitani Vol. II*, more particularly, the Russian section of the third part (published 1745), containing modern numismatic material. In this section of the MIP a total of 66 medals is listed, in general in the chronological order of the events they represent.¹

Each of the 26 sheets depicts the obverse and reverse of a medal and is numbered in the lower right corner. The drawings are all done in Indian ink and then brushed to create a low-relief effect. Comparison of the depictions and respective descriptions in the MIP shows that the drawings of the first four medals are missing. The first drawing in our collection is numbered '5' (see concordance table on p. 286). This sheet shows the obverse and reverse of a medal commemorating the capture of Schlüsselburg by Russian troops in 1702. The medal seems to belong to the series covering events from the Northern War which Peter the Great had ordered from the German medallist Philipp Heinrich Müller (1654-1719).² The drawing of the obverse of the medal, however, is signed OK, which suggests that this side was made with a die engraved not by Müller but by Osip Kalashnikov, who worked at the Moscow Mint from 1718 to the 1740's.³ Though this is the only medal listed under no. 5 in the MIP catalogue, there is another drawing numbered '5', which depicts a different Schlüsselburg medal made by Fedor Alekseev. The following sheet (no. 6) shows a medal commemorating the capture of Nyenschanz. The drawing corresponds with medal no. 6 in the MIP catalogue.

Then there is a large gap until the drawing of the medal commemorating the capture of Vyborg in 1710. The medal was made by Müller and belongs to the same series as the medals mentioned above. The sheet is numbered '24' in the lower right corner and '26' under the depiction (this coincides with the number in the MIP catalogue).

Because the depictions on the obverse of some of the Müller 1710 series are the same, they are not repeated. Instead the drawings have empty circles with a Latin or German annotation in them, referring to an earlier item which had already been drawn. For instance on sheets nos. 26 and 28 'Vide Narva' is a reference to the depiction of the obverse of the medal commemorating the capture of Narva (MIP catalogue no. 13). The circle of the obverse of the medal drawn on sheet no. 36, corresponding to MIP cat. no. 38 (the battle of Pelkina river) has 'Vide S. 5 M.O. oder Erbauung der Stadt St.Petersburg' (this is a reference to the missing drawing of the medal commemorating the

1. *Musei Imperialis Petropolitani Vol. II, pars tertia*, St Petersburg 1745, pp. 33-48.

2. See Exh. cat. Amsterdam 1996, p. 187.

3. Shuchukina 1994, p. 32.

foundation of St Petersburg, corresponding to MIP cat. no. 7).

That the numbers on almost all of the drawings do not coincide with the respective descriptions in the MIP catalogue (see concordance table below) does not negate the close relation between the series of drawings and the series of medals that were kept in the *Kunstkamera* at that time. The close relationship is confirmed by, among other things, the order in which the drawings are arranged, which faithfully reproduces an 'error' in the order of the MIP catalogue. For instance in the case of MIP cat. no. 44 (= drawing no. 42, the medal commemorating the meeting of Peter the Great and August II of Poland in Birzi, in 1701), both the drawing and the medal have been mistakenly placed between the medals commemorating Peter commanding four fleets at Bornholm (1716) and his visit to Paris (1717). This mistake was probably made because the medal in question is not dated. After 1717 the discrepancies between the numbers on the drawings and the MIP catalogue numbers for the accompanying medals become more numerous, because only one or two of the several existing medals commemorating the same event was selected for reproduction. For example, of the five medals commemorating the Nystad peace treaty of 1721 listed in the MIP catalogue as cat. nos. 53-57, we have only two drawings (nos. 48 and 49).

None of the 26 sheets is signed and there is no alternative way of ascribing the drawings to specific artists. However, the present series gives a good idea of the draughtsmen's skill. Typical of all the drawings is their precision in the reproduction of details and inscriptions. On the basis of the manner of execution, the drawings can be divided into four groups.

The first group includes the two sheets marked '5'. The drawings of both the Schlüsselburg medals are characterized by well-defined brush strokes, accentuated contours and dark solid backgrounds. The missing drawings nos. 1-4 were possibly done by the same draughtsman.

The drawings of the second group show slight traces of brush-delineated shades conveying the thickness of the medals depicted. This group includes drawing nos. 24, 26 and 28, of medals commemorating the events of 1710: the capture of Vyborg, Riga and Dinamunde. The same draughtsman may have produced drawing nos. 25 and 27 that have not survived.

The third group comprises sheets with drawings in a style close to that of the antique medals of the *Kunstkamera*, focusing on details delicately delineated in brush. The drawings of this set reproduce the medals of the Müller series (nos. 31, 32, 33, 35, 36, and 37). The

group also includes the large gold Gangut medal (no. 39) and the medal commemorating the meeting of Peter the Great and August II in Birzi (no. 42). None of the drawings belonging to this group show the medal obverses, with the exception of the drawing of the medal commemorating the meeting in Birzi. Latin-German inscriptions on the empty obverses suggest that the draughtsman was German.

The drawings of the fourth group are the most professionally executed. This set demonstrates the highest quality of draughtsmanship in combination with a skilful brush modelling of volume. This applies to both medals marking the trial of Prince Alexey (nos. 45 and 46). It should be noted that in drawing no. 45 the artist corrected the defects of the reverse die. The most truthful to details is drawing no. 50, depicting the Cossack medal of 1723, with a wonderfully executed portrait of Peter the Great, including all the minute details of the Russian national emblem on the reverse, with the coats of the provinces on the eagle's wings and the links of the chain of the order of St Andrew. In contrast to this is the omission of the signature 'OK', which can be found on the obverse of the original medal. Other drawings belonging to this group are nos. 44 and 55.

Further research may throw some light on whether indeed four different draughtsmen worked on this project and who they were.

The purpose of the drawings is open to varying interpretations. Their close relationship with the MIP catalogue would seem to suggest in the first instance that they were destined for use in an illustrated edition of the catalogue. There may also have been a plan for a separate publication, paying tribute to Peter the Great's heroic deeds. Publications of this sort, which in actual fact had the same function as the series of medals themselves, and even served to strengthen the effect, were also made at other European courts. A shining example of this was the publication which first appeared in 1701 and was reprinted in 1723 entitled *Médailles sur les principaux événements du règne de Louis le Grand, avec des explications historiques*, an impressive book printed in folio. In the second edition of 1723 the book contained the depictions of 318 medals, each accompanied by a text explaining what was represented, which might have been a battle scene, conquest of a city, peace treaty or diplomatic victory. Peter the Great took a personal interest in the propaganda opportunities provided by this type of illustrated publication, and had arranged for a copy to be ordered for him in Amsterdam.⁴ It is quite likely that sometime before or after his death the plan for a Russian equivalent was conceived.

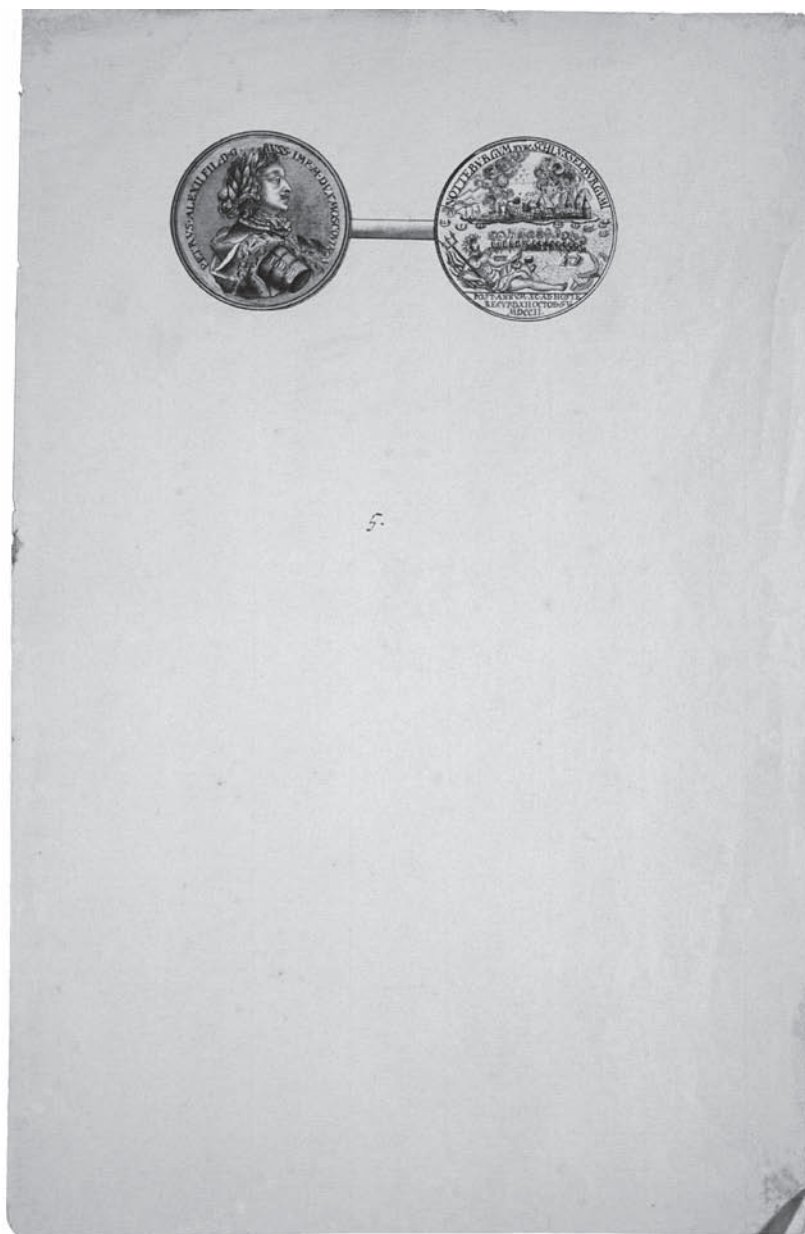
4. See p. 37 in the present publication.

CONCORDANCE TABLE

<i>Drawing no.</i>	<i>MIP cat. No.</i>	<i>Subject, date, medallist</i>
(1?) Drawing missing	1	Capture of Azov, 1696, J. Boskam
(2?) Drawing missing	2	Capture of Azov, 1696, F. Alexeev
(3?) Drawing missing	3	Peter's first journey abroad, 1698, Chr. Wermuth
(4?) Drawing missing	4	1702, subject and medallist unknown
5	5	Capture of Schlüsselburg [1702], Ph.H. Müller. Obverse signed OK
5	Missing	Capture of Schlüsselburg, Fedor Aleksejev
6	6	Capture of Nyenschanz, Ph.H. Müller
(7?) Drawing missing	7	Foundation of St Petersburg [1703], Ph.H. Müller
?	13	Capture of Narva, Ph.H. Müller
24	26	Capture of Vyborg, 1710, Ph.H. Müller
(25?) Drawing missing	25	Capture of Reval, 1710, Ph.H. Müller
26	27	Capture of Riga, 1710, Ph.H. Müller
(27?) Drawing missing	28	Capture of Riga
28	29	Capture of Dinamunde, 1710, Ph.H. Müller
31	32	Capture of Arensburg [1710], O. Kalashnikov
32	33	Russian victories in the Northern War in 1710, Ph.H. Müller
33	34	Capture of Livonia, Ph.H. Müller
[35]	37	Landing in Aabo, 1713, Ph.H. Müller
36	38	Battle of the Pelkina river, Ph.H. Müller
37	39	Battle of Vasa, 1714, Ph.H. Müller
39	42	'Gangut medal', 1714, unknown Russian medallist
41	43	Peter commanding four fleets at Bornholm, 1716, A. Schultz
42	44	Meeting Peter the Great and August 11 in Birzi [1701]
44	47	Visit to Paris, 1717, Du Vivier
[45]	49	Trial Prince Alexey, 1717, O. Kalashnikov
46	51	Trial Prince Alexey, 1718, O. Kalashnikov
47	52	Sea battle of the Grönhamm, 1720, unknown Russian medallist
48	53	Nystad peace treaty, 1721, unknown Russian medallist
49	57	Nystad peace treaty, 1721, A. Schultz
50	60	'Cossack medal', 1723, O. Kalashnikov
52	61	Coronation Catherine I, 1724, O. Kalashnikov
53	64	Coronation Catherine I, 1724, A. Schultz
(54?) Drawing missing	65	Death of Peter the Great, [1725, A. Schultz]
55	19	Construction of Taganrog harbour, 1709, S. Gouin and H. Haupt
56	35	Oval medal awarded to the participants of the Prut campaign, 1711
<i>Total: 26 drawings</i>		

ICONES NUMMORUM





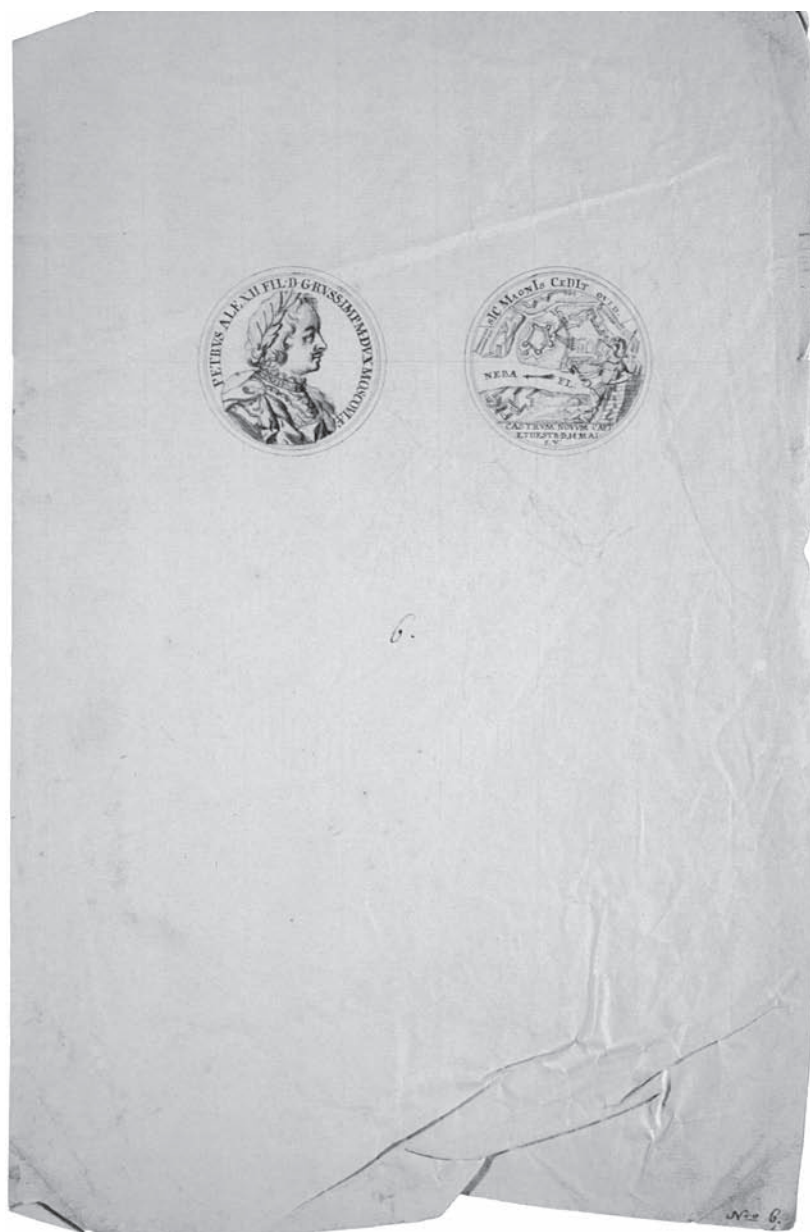
1996

1996

Obverse and reverse of a medal in commemoration of the capture of Schlüsselburg in 1702. From the *Northern War* series by F.G. Müller, depicted in the upper third of the sheet. Obverse: bust portrait of Peter the Great, turned to the right, wearing armour, a laurel wreath and a cloak. Inscribed in the truncation of the arm: ОК (the artist's

initials); around the depiction: PETRVS. ALEXII. FIL. D. G. RVSS. IMP. M. DVX MOSCOVIAE. Reverse: view of a fortress on an island in the middle of the river Neva, besieged by boats from the water and by artillery from the land, with a reclining Neptune figure in the foreground holding a trident in his right hand and a key in his left. Inscribed above the

depiction: NOTTEBVRGVM NVNC SCHLVSELBVRGVM; below it, in three lines in the truncation: POST ANNVM. XC. AB HOSTE RECVP. D.XII OCTOB. S. V. MDCCII.

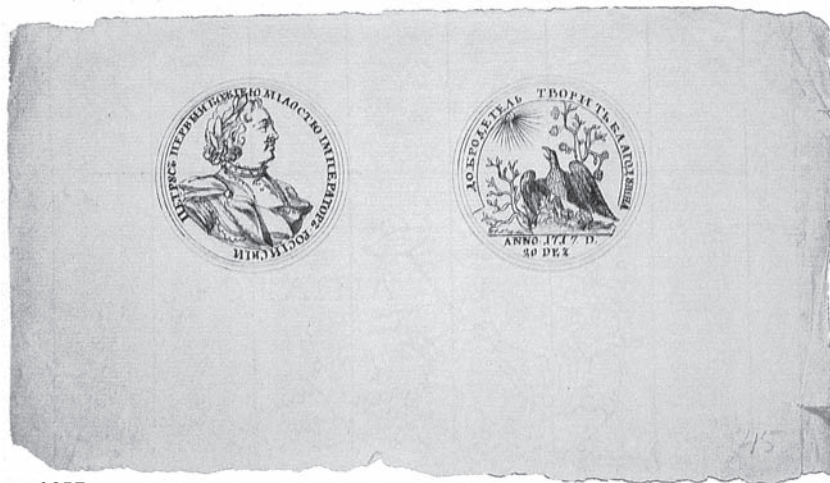


1997

1997

Obverse and reverse of a medal in commemoration of the capture of Nyenschanz in 1703. From the *Northern War* series by F.G. Müller. Obverse: bust portrait of Peter the Great, turned to the right, wearing a laurel wreath, armour and a cloak fastened on the shoulder with an agraffe. Inscribed all around: PETRVS. ALEXII FIL. D. G. RVSS. IMP. M. DVX

MOSCOVIAE. Reverse: map of the locality showing the river Neva and a fortress on the bank. Mars is standing in the foreground right, holding a spear in his left hand and a key in his right. Inscribed on the banderole above: *sic Magnis cedit ovid*; in the middle: NEBA FL; in the truncation below, in three lines: *castrum novvm capt. et destr. d. 14 mai. s. v.*



2017

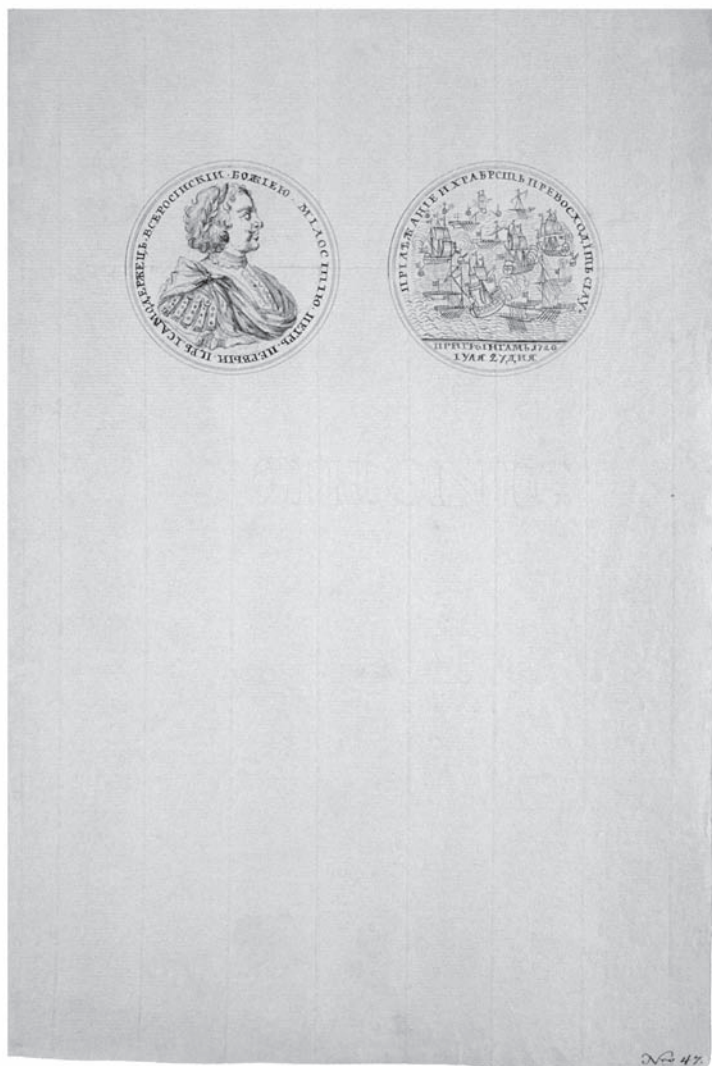
2017
Obverse and reverse of a Cossack medal, 1723, by Osip Kalashnikov, depicted in the upper third of the sheet. Obverse: bust portrait of Peter the Great, turned to the right, wearing armour, a laurel wreath and a cloak. Inscribed around the depiction: ПЕТРЪ. А. БЖИЕЮ МЛОСТЮ ІМПЕР. ІСАМОДЕР. ВСЕРОССИІСКИИ (PETER A[LEXEEVICH] WITH D[IVINE] ASS[ISTANCE] EMPER[OR] AND SOLE

R[ULER] OF GREATER RUSSIA). Reverse: the national emblem of Russia, a double-headed eagle with a sceptre and an orb. Inscribed below it: 1723.



2020

2020
Obverse and reverse of a medal in commemoration of the battle of Grönhamm in 1720, by an unknown Russian medallist, depicted in the upper third of the sheet. Obverse: bust portrait of Peter the Great in armour, with five ribbons on the shoulder plate, and wearing a laurel wreath and a cloak. Inscribed around the depiction: БОЖИЕЮ МЛОСТЮ ПЕТРЪ. ПЕРВЫЙ. ЦРЬ. ІСАМОДЕРЖЕЦЬ



2013

ВСЕРОССИЙСКИИ (WITH DIVINE ASSISTANCE PETER THE FIRST CZ[AR AND SOLE RULER OF GREATER RUSSIA). Reverse: View of a sea battle. Inscribed: ПРИЛЕЖАНИЕ И ХРАБРОСТЬ ПРЕВОСХОДИТЬ СИЛУ (DILIGENCE AND COURAGE EXCEED FORCE; the letter o is missing in храбрость, courage); in the truncation below, in two lines ПРИ ГРЕЙНГАМЕ. 1720 ИУЛЯ 27 ДНЯ (NEAR GRÖNHAMM, 1720, JULY 27).

2013

Obverse and reverse of a medal in commemoration of the trial of Prince Alexey in 1717. by Osip Kalashnikov; depicted on a sheet of paper of about a third of the size of a normal sheet. Obverse: bust portrait of Peter the Great, turned to the right, wearing armour, a laurel wreath and a cloak. Inscribed around the depiction: ПЕТРУСЬ ПЕРВЫЙ БОЖЕЮ МЛОСТЮ ИМПЕРАТОРЬ. РОСИЙСКИИ

(PETRUS THE FIRST WITH DIVINE ASSISTANCE EMPEROR OF RUSSIA). Reverse: eagle, with three nestlings in a nest between two branches of a tree, looking at the sun; the left branch is bare, the right one is in blossom and has leaves. Inscribed around the depiction: ДОБРОДЕТЕЛЬ ТВОРИТЬ БЛАГОДУШНА (A GOOD-DOER CREATES WITH EASE); in the truncation, in two lines: ANNO. 1717. D. 20 DEZ

APPENDIX I

Artists who have contributed to the Paper Museum

Evgenya I. Gavrilova, Elena S. Stetskevich

Abumov (or: Abakumov), Grigory Matveyevich (Moscow 1717-3 October 1745 St Petersburg)

Draughtsman and engraver, son of the head man at the Mint. He was transferred to the Academy of Sciences from the Slavonic, Greek, and Latin Academy in 1732. He studied drawing and engraving under Ottomar Elliger, and map-making under Georg Johann Unverzagt. From 1733 to 1743 he was on the staff of the Engraving Chamber; later on he was transferred to the Type-Setting Workshop- and in 1744 to the Printing Workshop.

Berckhan, Johann Christian (1709-1751 St Petersburg)

Draughtsman and painter. In 1733-1746 he took part in the Second Kamchatka expedition. In 1747, he was appointed as Kunstkamera artist responsible for depicting natural objects, replacing the deceased Maria Dorothea Gsell. Depicting clothes worn by Asian peoples was also one of his tasks. He remained active in the zoological collection of the Kunstkamera until his death.

Bernz, Franz Andreas (Hamburg 1709-after 1760 St Petersburg)

Draughtsman and engraver. From 1727 he studied at the Academy Gymnasium. In 1728, as a pupil of the Engraving Chamber, he studied drawing and engraving under Ottomar Elliger; in the 1737 he became an apprentice (bachelor) of that Chamber. From the 1730s onwards he was a teacher of drawing at the Academy Gymnasium. On 1 July 1743 he was dismissed from the Academy of Sciences. In 1760 he taught drawing at the Engineer Cadet school.

Bolotov, Nikita (1733-after 1752)

Draughtsman. Student of the Drawing Chamber. In 1754 he was active in the Kunstkamera, drawing the natural history collection and working as a museum assistant.

Elliger, Ottomar (Amsterdam 1703?-1735 St Petersburg)

Engraver and draughtsman; son of the painter Ottomar Elliger (1666-1735). He worked in St Petersburg from the end of 1727, first at the Department of Gardening. From August 1728 to 1735 he was master of the Chamber of Engraving of the Academy of Sciences, responsible for the drawing classes (among his students were Abumov, Bernz, Kachalov, Sokolov).

Ermolayev, Pyotr (prior to 1713-1778)

Draughtsman and lathe apprentice; son of a brick layer. From 1735 he studied at the Academy of Sciences under Andrey Konstantinovich Nartov. He studied drawing at the Chancellery of Construction under the architects Domenico Trezzini and Mikhail Zemtsov, and at the Drawing Chamber of the Academy of Sciences. After 1756 he worked at the Department of Geography.

Grekov, Andrey Angilevich (St. Petersburg 1711-1791 St Petersburg)

Draughtsman and watercolorist, son of a Greek shipmaster in Russian service, Ageleo Delilo. From 1727 to 1728 he studied under the painter Andrey Matveyev. From 1729 he studied at the Academy of Sciences under the painter Georg Gsell and the watercolorist Maria Dorothea Gsell. In 1732, he was

appointed curator and draughtsman of the Kunstkamera collections. Apprentice at the Academy in 1737. From 1743 he was responsible for 'drawing activities' at the Academy Gymnasium and taught there himself. From 1769 he was a teacher of drawing to Grand Duke Pavel Petrovich. In 1765 he was dismissed from the Academy.

Kachalov, Grigory Anikiyevich (Novgorod District 1711 or 1712-24 October 1759 St Petersburg)

Engraver and draughtsman; son of a staff officer. From 1728 he studied at the Academy Gymnasium. In 1731 he started studying drawing and engraving under Ottomar Elliger and Christian Albrecht Wortmann. He became an apprentice at the Academy of Sciences in 1737, master of 'perspective engraving' in 1750, and was head of the Chamber of Engraving from 1757 to 1759.

Lürsenius (or: Lürzenius), Johann Wilhelm (Prussia 1704-1771)

Master of drawing at the Academy of Sciences. He started as a copyist and teacher of drawing at the Academy Gymnasium in 1728. From 1733 to 1743 he took part in the Second Kamchatka expedition; back in St Petersburg he depicted plants which Johann Georg Gmelin had collected in Siberia. From 1746 to 1749 he was drawing master at the wall-paper factory of Her Imperial Majesty's Cabinet. From 1749 to 1754 master responsible for 'drawing herbs and natural objects' at the Kunstkamera.

Mattarnov, Philipp Egorovich (St Petersburg 1714-18 January 1742 St Petersburg)

Engraver and draughtsman; son of a St Petersburg architect.

After his father's death (1719), he lived in the sculptor Konrad Osner's family, then moved to the sculptor Christian Albrecht Wortmann's family (from 1728), and finally lived with the sculptor Ottomar Elliger's family (from 1732).

Apprentice at the Academy of Sciences in 1737. Author of engraved portraits, frontispieces, and illustrations in publications of the Academy.

Makhaev, Mikhail Ivanovich (Vereysk District of the Province of Moscow 1717-1770 St Petersburg)

Draughtsman; son of a priest. He studied at the Admiralty Navy school in 1729. From 9 October 1731 he studied tool-making at the Academy of Sciences; from 1735 map-making and type-setting under Georg Johann Unverzagt. During the same period he was a student of the painter Bartolommeo Tarsia and of Ottomar Elliger. Apprentice at the Academy in 1742, later becoming head of the 'map-making and type-setting department' from 1743. In 1748-1751 he was involved in making perspectives under Giuseppe Valeriani. Map maker in 1765. Teacher of perspective drawing (1758-1766).

Nartov, Stefan Andreyevich (after 1723 ?)

Son and pupil of Andrey Nartov.

Nekrasov, Mikhail Yakovlevich (1712-1778)

Draughtsman. From 1734 to 1737 he studied drawing under J. Kassel; in 1737 he was transferred to the Academy of Sciences to study drawing under an apprentice (bachelor) Philipp Mattarnovi and to study painting under the master Georg Gsell. In 1741 he attended Johann Elias Grimmel's classes at the Drawing Chamber of the Academy of Sciences. Certified apprentice in 1741. From 1741 to 1745, he took part in the Orenburg expedition. In 1745 he worked at the Academy of Sciences, later on at the Chancellery of Artillery and Fortifications.

Nechaev, Yakov (? - after 1771)

Draughtsman. From 1735 to 1743, as pupil of the Academy of Sciences, he was drawing Kunstkamera objects; studied collection maintenance under Andrey

Grekov and attended the painter Bartolommeo Tarsia's classes. In 1743 he studied painting under Johann Elias Grimmel. From 1743 to 1771 he served at the Heraldry Office. In 1771 he was a lieutenant and a master of drawing.

Polyakov, Andrey Ilyich (Moscow 1712-8 May 1784 St Petersburg)

Engraver and draughtsman; son of a saddler of Polish extraction. He was sent from Moscow to the Academy of Sciences in 1733. He studied under Georg Johann Unverzagt at the Map-Making Chamber. He took part in creating engravings for 'the Chambers of the Academy of Sciences' (1740). Apprentice in 1742. Engraver of mathematical diagrams, maps, and letters. He worked at the Academy of Sciences until 1761.

Rykov, Maxim Rodionovich (1730-after 1762)

Draughtsman of the Academy of Sciences; son of a soldier belonging to the Preobrazhensky regiment. He studied at the Academy Gymnasium (from 1738) and the Chamber of Drawing of the Academy of Sciences under Christian Albrecht Wortmann and Johann Elias Grimmel (from 1740). From 1748 he worked at the Kunstkamera, teaching the 'depiction of various natural objects'. In 1752 he accompanied Stepan P. Krashennnikov in his expedition to Ingermanland, where he depicted herbs. He was Grekov's assistant in the drawing classes at the Academy Gymnasium from 1752, and drawing apprentice of the Academy of Sciences from 1754.

Shereshperov, Ivan (? -after 1746)

Draughtsman of the Academy of Sciences. From 1734 to 1748 he took part in the Orenburg expedition; from 1734 he studied drawing under J. Kassel; in 1737 he was transferred to the Academy of Sciences to study drawing under an apprentice, Mattarnovi, and to study painting under the master Georg Gsell. In 1740 he attended classes at the Chamber of Drawing of the Academy of Sciences. In 1742 he studied painting under Johann Elias Grimmel. In 1745 he was certified as an apprentice and shortly afterwards dismissed from the Academy of Sciences.

Sokolov, Ivan Alexeyevich (Moscow 1717-4 February 1757 St Petersburg)

Portrait engraver and draughtsman; son of a deacon. Studied at the Academy Gymnasium from 1726. Studied engraving under Ottomar Elliger's (from 1731). He also studied under Christian Albrecht Wortmann. He was head the Chamber of Engraving (from 1746) and Printing Chamber (from 1747). Founder of the Academy workshop of engraving.

Terentyev, Ekim (St Petersburg 1723/1725-1762/1763 St Petersburg)

Draughtsman and engraver at the Academy of Sciences.

Vinogradov, Efim Grigoryevich (St Petersburg 1725/1728-1769 St Petersburg)

Engraver. Son of a church warden. In 1739, he studied drawing and engraving under Phillipp. Mattarnovi and Christian Albrecht Wortmann. In August 1740, he became an apprentice (bachelor) to the Chamber of Drawing, studying under the botanist Johann Georg Gmelin. In 1745 he was depicting Siberian plants for Gmelin.

APPENDIX 2

Description of the titles of the boxes of the Paper Museum

A.

Descriptions of the titles of the boxes in which the drawings of the Paper Museum were stored. *Musei Imperialis Petropolitani Vol. I-II*, Vol. II, pars prima, St Petersburg 1741, pp. 176-178.

ICONES PICTAE RERVM, QUAE IN ACADEMIAE THESAURIS INSUNT

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Nr. 1. 2. Delineationes Architectonicae, Aedium Academicarum et Technophilacii.

Vol. I. II.

3-5. Icones Figurarum anatomicarum. Vol. I-III.

6. Icones foetuum. Vol. IV.

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Nr. 7. Icones monstrorum. Vol. V.

8. 9. Icones quadrupedum. Vol. I. II.

10. 11. Icones avium. Vol. I. II.

12. 13. Icones piscium. Vol. I. II.

14. Icones Amphibiorum. Vol. I.

15. [Icones] marinorum. Vol. I.

16. [Icones] serpentum. Vol. I.

17. [Icones] lacertorum. Vol. I.

18. 19. Icones Insectorum. Vol. I. II.

20-22. [Icones] plantarum singulari artificio, coloribus veris, magnitudine ut plurimum naturali, in locis natalibus, Capite scil. Bonae Spei, et variis Asiae meridionalis Regionibus, depictarum. Vol. I-III.

23. Icones herbarum, arborum et fruticum, in Promontorio Bonae Spei et variis Indiae Orientalis regionibus crescentium, sedis incertae. Vol. IV.

24. 25. Icones Plantarum in Promontorio Bonae Spei sponte provenientium, minus artificiosarum, quarum maxima pars extat in *Jacobi Petiuerii Gazophylacio Naturae et artis Tab. 81-91*, quaedam et in *C. Buxbaumii* Centuriis, tertia praecipue. Vol. V. VI.

26. Icones Plantarum ex iisdem locis, minus perfectarum, in quibus aut floris aut fructus figura desideratur. Vol. VII.

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Nr. 27. Apographae Icones Plantarum, in promontorio Bonae Spei praecipue crescentium. Vol. VIII.

28. Similium Sinico atramento delineatarum. Vol. IX.

29. Apographae Icones plantarum, quae in centuriis Buxbaumii editae sunt, cum quibusdam aliis figuris herbarum, orchidum, praesertim in dictis centuriis non extantibus, quas in itinere Constantinopolitano delineari curavit. Vol. X.

- 30. Icones plantarum et radicum monstrosarum. Vol. XI.
- 31. Icones miscellaneorum. Vol. XII.
- 32. [Icones] mineralium. Vol. I.
- 33. 34. Icones lapidum. Vol. I. II.
- 35. 36. [Icones] Instrumentorum Physicorum et Mathematicorum. Vol. I. II.
- 37. 38. Icones operum artificiosorum. Vol. I. II.
- 39. 40. [Icones] adparatus vestiarii. Vol. I. II.
- 41-44. [Icones] operum Chinensium. Vol. I-IV.
- 45-46. [Icones] rerum rariorum. Vol. I. II.
- 47-49. [Icones] adparatus pretiosi. Vol. I-III.
- 50. Icones gemmarum. Vol. I.
- 51-58. Icones nummorum. Vol. I-VIII.

B.

Handwritten Latin list of the boxes reserved for the drawings of the Paper Museum of the Academy of Sciences in St. Petersburg. This list is part of the handwritten catalogue *Musei Imperialis Vol. II Pars Prima qua continentur Instrumenta, Tabulae Pictae, Res rariores, Opera Pretiosa et Gemmae*, author and date unknown. (Archives of the Russian Academy of Sciences (St Petersburg Branch), section III, inventory I, file 387, pp. 112-114)

The text of this manuscript is almost the same as the text published in the *MIP*. One important difference is that for twenty-seven of the fifty-eight boxes indications are given of the number of drawings stored in each specific box. The number of the box is in the front. After the bibliographical entry the number is given of the group of boxes to which the one concerned belongs with Vol.(umes) and a Roman numeral. The number of sheets is indicated as fol.(ia). This manuscript is a unique source for gaining insight into the number of sheets that were kept in a specific box at the time when it was written (the total number amounts to 2353 drawings according to this manuscript). It is assumed that the list was drawn up shortly before the printed catalogue appeared.

The manuscript is to be published here for the first time by N.P. Kopaneva.

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TABULAE PICTAE

- 1. Iconum delineationum architectonicarum, Aedium Academicarum et Technophilacii. Vol. I.
- 2. [Iconum delineationum architectonicarum, Aedium Academicarum et Technophilacii.] Vol. II.
- 3. Figurarum anatomicarum. Vol. I. fol.68.
- 4. [Figurarum anatomicarum] Vol. II.fol.105.
- 5. [Figurarum anatomicarum] Vol. III. fol.120.
- 6. Iconum foetuum. Vol. IV. fol. –
- 7. Iconum monstrorum. Vol. V. fol. –
- 8. Iconum quadrupedum. Vol. I. –
- 9. [Iconum quadrupedum] Vol. II. –
- 10. Iconum auium. Vol. II. –
- 11. [Iconum auium] Vol. II. –

12. Iconum piscium. Vol. I.
13. [Iconum piscium] Vol. II.
14. Iconum Amphybiorum. Vol. I.
15. Iconum marinorum. Vol. I.
16. Iconum serpentum. Vol. I.
17. Iconum lacertorum. Vol. I.
18. Iconum Insectorum. Vol. I.
19. [Iconum Insectorum] Vol. II.
20. Iconum plantarum singulari artificio coloribus veris, magnitudine ut plurimum naturali, in locis natalibus

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Capite scil. Bonæ Spei, et variis Asiæ meridionalis Regionibus, depictarum. Vol. I. fol. 135.

21. [Iconum plantarum singulari artificio coloribus veris, magnitudine ut plurimum naturali, in locis natalibus, Capite scil. Bonæ Spei, et variis Asiæ meridionalis Regionibus, depictarum] Vol. II. fol. 122.
22. [Iconum plantarum singulari artificio coloribus veris, magnitudine ut plurimum naturali, in locis natalibus, Capite scil. Bonæ Spei, et variis Asiæ meridionalis Regionibus, depictarum] Vol. III. fol. 67.
23. Iconum herbarum, arborum et fruticum, in promontorio Bonæ Spei et variis Indiæ Orientalis regionibus crescentium, sedis incertæ. Vol. IV. fol. 44.
24. Iconum plantarum in Promontoriæ Bonæ Spei provenientium, minus artificiosarum, quarum maxima pars extat in Jacobi Petiverii Gazophylacio Naturæ et Artis, Tab.: 81-91, quædam et in C. Buxbaumii Centuriis, tertia præcipue. Vol. V. fol. 181.
25. [Iconum plantarum in Promontoriæ Bonæ Spei provenientium, minus artificiosarum, quarum maxima pars extat in Jacobi Petiverii Gazophylacio Naturæ et Artis, Tab.: 81-91, quædam et in C. Buxbaumii Centuriis, tertia præcipue] Vol. VI. fol. 137.
26. Iconum plantarum ex eisdem locis minus perfectarum, in quibus aut floris aut fructus figura desideratur. Vol. VII. fol. 116.
27. Apographorum Iconum plantarum in Promontorio Bonæ Spei præcipue crescentium. Vol. VIII. fol. 43.
28. Similium sinico atramento delineatarum. Vol. IX. fol. 222.
29. Apographorum Iconum Plantarum, quæ in centuriis Buxbaumii editæ sunt, cum quibusdam

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aliis figures herbarum orchidum, præsertim in dictis centuriis non extantibus, quas in itinere Constantinopolitano delineari curavit. Vol. X. fol. 72.

30. Iconum plantarum et radicum monstrosarum. Vol. XI.
31. Iconum miscellaneorum. Vol. XII. fol. –
32. Iconum mineralium. Vol. I. fol. –
33. Iconum lapidum. Vol. I. fol. –
34. [Iconum lapidum] Vol. II. fol. –
35. Iconum Instrumentorum et Mathematicorum. Vol. I. fol. 76.
36. [Iconum Instrumentorum et Mathematicorum] Vol. II. fol. –
37. Iconum operum artificiosorum. Vol. I. fol. 58.
38. [Iconum operum artificiosorum] Vol. 2. fol. 39.

- 39. Iconum adparatus vestiarii. Vol. I. [fol.] 100
- 40. [Iconum adparatus vestiarii] Vol. II. [fol.] 41
- 41. Iconum operum Chinensium. Vol. I. [fol.] 107
- 42. [Iconum operum Chinensium] Vol. II. [fol.] 112
- 43. [Iconum operum Chinensium] Vol. III. [fol.] 83.
- 44. [Iconum operum Chinensium] Vol. IV. [fol.] 54.

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- 45. Iconum rerum rariorum. Vol. I. fol. 62.
- 46. [Iconum rerum rariorum] Vol. II. [fol.] 42.
- 47. Iconum adparatus pretiosi. Vol. I. [fol.] 41
- 48. [Iconum adparatus pretiosi] Vol. II. [fol.] 54.
- 49. [Iconum adparatus pretiosi] Vol. III. [fol.] 52.
- 50. Iconum gemmarum. Vol. [I.]
- 51. Iconum nummorum. Vol I. –
- 52. [Iconum nummorum] Vol. II. –
- 53. [Iconum nummorum] Vol. III. –
- 54. [Iconum nummorum] Vol. IV. –
- 55. [Iconum nummorum] Vol. v. –
- 56. [Iconum nummorum] Vol. VI. –
- 57. [Iconum nummorum] Vol. VII. –
- 58. [Iconum nummorum] Vol. VIII. –

APPENDIX 3

Description of the nineteen still existing boxes of the Paper Museum

By Natalya Kopaneva and Oleg Neverov

The drawings of the Paper Museum were (and many of them are now) preserved in container-boxes, specially made for this purpose. The boxes were probably made in the late 1730s in the form of book covers, which look the same as other books of the period to be found in the Academy of Sciences in St Petersburg.

In the description of the boxes of the 'Paper Museum' in the catalogue *Musei Imperialis Petropolitani Vol. II*, pars prima, 1741, pp. 176-178 mention is made of 58 boxes. Nowadays, the whereabouts of nineteen of these are known: thirteen are preserved in the Archives of the Russian Academy of Sciences, (St Petersburg Branch). They contain visual materials i.e. watercolours and drawings. Six boxes are in the State Hermitage, five of which contain depictions of the numismatic collections of the *Kunstkamera*. They are preserved in the Numismatics Department. One box, with drawings of rarities, is in the Department of the History of Russian Art.

The boxes are made of hard cardboard bound in brown calf leather, with ornamented paper glued to the inside of the boxes. The boxes are 120 cm. high x 55 cm. wide and 9,5 cm. deep. The front cover illustration and the back cover illustration of each box bear a stamped golden emblem ('super-ex libris') with a floral decoration in the middle (the emblem of the Academy of Sciences in St Petersburg) and a stamped, golden ornamental border around the edges. Some of the boxes have numbers in pencil (possibly an indication of the number of drawings in the box), on the fly-leaf.

The spine of the container-box is separated into nine sections by raised bands. The second section contains the title of the box, stamped in gold. The third section contains the volume number (the above mentioned list of 58 boxes in the *MIP* catalogue describes 31 groups, consisting of one or more volumes). Section nine in some cases contains an unidentified number. The other sections are adorned with floral decorations. All the boxes have brass fastenings.

Later on, labels were attached to the boxes preserved in the Hermitage and in the Archives, with inventory numbers of the drawings contained.

Below, the inscriptions on the spine of each box are presented in the table, with the present-day inventory numbers of the boxes. The numbering in the first column and the indication of the present-day contents are ours; they are not indicated on the boxes.

no.	Section two	Section three	Section nine	Present-day inventory number	Present-day contents
1.	inscription missing	inscription missing	xx no. 24	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 3. no. 1-10.	Miscellaneous drawings
2.	Iconum piscium	inscription missing	xx no. 25	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8.	'Paper Museum'
3.	Iconum lacertorum	Volum I	xx no. 27	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8, file 4. 626-704	'Paper Museum'
4.	Iconum avium	Volum I	xx no. 28	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 86-94	'Paper Museum'
5.	Iconum Qvadrupedum	Volum I	xx no. 29	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 174-256	Watercolours by Maria Sibylla Merian
6.	Iconum rerum rariorum	inscription missing	xx no. 31	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 537-625	'Paper Museum'
7.	Iconum adparatus vestiarii	Volum II	xx no. 33	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 325-391	'Paper Museum'
8.	Icones adparatus pretiosi	Volum I	inscription missing	Department of the History of Russian Culture, State Hermitage	'Paper Museum'
9.	Iconum adparatus vestiarii	Volum III	xx no. 33	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 451-536	'Paper Museum'
10.	Iconum operum chinensium	Volum I	inscription missing	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 257-324	'Paper Museum'
11.	Iconum operum chinensium	Volum II	inscription missing	Archives of the Russian Academy of Sciences (St Petersburg branch), Division IX. inventory 8. 392-450	'Paper Museum'
12.	Iconum operum chinensium	Volum VII	inscription missing	Archives of the Academy of Sciences (St Petersburg branch), inventory 3. no. 1-10	Miscellaneous drawings
13.	Iconum plantarum	Volum VII	inscription missing	Archives of the Academy of Sciences (St Petersburg branch), no catalogue number	Empty Box
14.	Iconum serpentum	Volum I	inscription missing	Archives of the Academy of Sciences (St Petersburg branch), Division IX, inventory 3, no. 15-22.	Miscellaneous drawings
15.	inscription missing	inscription missing	inscription missing	Department of Numismatics, State Hermitage (411282)	'Paper Museum'
16.	Icones nummorum	Volum II	inscription missing	Department of Numismatics, State Hermitage (411283)	'Paper Museum'
17.	Icones nummorum	Volum III	inscription missing	Department of Numismatics, State Hermitage (411284)	'Paper Museum'
18.	Icones nummorum	Volum IV	inscription missing	Department of Numismatics, State Hermitage (411285)	'Paper Museum'
19.	Icones nummorum	Volum V	inscription missing	Department of Numismatics, State Hermitage (411286)	'Paper Museum'

APPENDIX 4

The Catalogue section: an explanation

Natalya Kopaneva and Bert van de Roemer

Despite the diversity of the objects depicted in the drawings, every effort has been made to make the entries as uniform as possible. They comprise the following:

- catalogue number;
- a description of the object;
- the description of the object in the *Musei Imperialis Petropolitani* (MIP) catalogue (1741-1745);
- name of the artist;
- date of the drawing;
- inscription(s) on the drawing;
- material(s) used in the drawing;
- measurements of the paper;
- current location of the drawing and inventory number;
- initials of the author;
- additional information (optional).

The drawings are categorized in nine sections, which are based on the 56 boxes named in the *Musei Imperialis Petropolitani* catalogue. To emphasize the 18th-century function and scope of the ‘Paper Museum’, sections have also been included of which no drawings have been found, for example, the section on minerals and gems. Within each section, the order of the descriptions of the objects in the *Musei Imperialis Petropolitani* catalogue has been followed as far as possible. This gives a global indication of the arrangement of the collection in the museum at the time the catalogue was published.

The catalogue number is followed by a modern description of the object depicted. This is generally a short, global description, sometimes with additional specific information. The Latin names, for example, of the specimens depicted in the *naturalia* section are given when known. The descriptions of the *artificialia* are often followed by information about the country of origin and the dating of the object. As different specialists have written the entries and knowledge about the objects varies very much, the descriptions and amount of information differ greatly from entry to entry.

The specialists’ descriptions are followed by the 18th-century description in Latin of the object taken from the *Musei Imperialis Petropolitani*. For a large number of drawings, the inscriptions have made it possible to determine the relevant citation from the 18th-century catalogue. In other cases, similarities between the text and illustration made this possible, with some degree of certainty. When a citation has been included that it not based on an inscription on the drawing, this is indicated by an asterisk (*) after the reference to the *Musei Imperialis Petropolitani*. A reference was not possible for a considerable number of the drawings. The entries for these drawings are included at the end of each section.

The citations are exactly as given in the *Musei Imperialis Petropolitani*, including the old spelling (‘v’ instead of ‘u’) and any printing errors. On some occasions, an object depicted in a drawing is mentioned in the 18th-century catalogue as being one

of several others. In these cases the whole description (with all the other numbers) has been included. The following abbreviations are used: 'Vol.' for 'Volume'; 'p.' for 'Pars' and 'p.' for 'page'.

After this description, the name of the artist responsible for the drawing is given, when known, followed by the date of the drawing. These details are based on the inscription(s) on the sheet or on information provided by the author of the entry.

Many of the drawings have inscriptions. These are also included in the entry and are given in anti-clockwise order, starting at the bottom left-hand corner. Inscriptions in Russian are immediately followed by a translation in brackets. Most of the inscriptions are in East Indian ink. When another material has been used, pencil for example, this is stated in brackets. Illegible inscriptions are represented by three dots (...). Inscriptions that have been crossed out have been transcribed in the same way.

The materials used in the drawing and the measurements of the paper are then given.

The entry concludes with the location and inventory number of the drawing and the initials of the author.

Extra information such as the origin of an object from a particular collection is introduced by 'N.B.' at the end of the entry. Here references are also given by means of 'compare' followed by the catalogue number(s), when an object is depicted in more than one drawing.

BIBLIOGRAPHY

PRIMARY SOURCES

Aldrovandi 1599-1668

Ulisse Aldrovandi, *Opera Omnia*, 13 vols., Bologna (Francesco de Franceschi/Giovanni Battista Bellagamba *et al.*) 1599-1668.

Amman 1739

Johann Amman, *Stirpium rariorum in imperio Rutheno sponte provenientium icones et descriptiones*, St Petersburg (Imperial Academy of Sciences) 1739.

Bacmeister 1776

Johann Volrath Bacmeister, *Essai sur la bibliothèque et le cabinet de curiosité et d'histoire naturelle de l'académie des Sciences de St. Pétersbourg*, St Petersburg (Johann Jacob Weitbrecht/Johann Karl Schnoor) 1776 (cf. Russian edition Bacmeister 1779).

Bacmeister 1779

Johann Volrath Bacmeister, *Opyt o biblioteke i Kabinete redkostey i istorii natural'noy Sankt-Peterburgskoy Imperatorskoy Akademii nauk* [Essay on the library and the Department of Rarities and Natural History of the St Petersburg Imperial Academy of Sciences], St Petersburg (Printing-office Marine Cadets Corps) 1779 (cf. French edition Bacmeister 1776).

Bayer 1728

Gottlieb Siegfried Bayer, *Auszug der älteren Staats-Geschichte, zum Gebrauch Ihro Kayserl. Majestät Petri des II [...]*, St Petersburg (Imperial Academy of Sciences) 1728.

Bayerus 1738

Theophilus Sigefridus Bayerus (= G.S. Bayer), *Historia Regni Græcorum Bactriani [...]*, St Petersburg (Imperial Academy of Sciences) 1738.

Bayerus 1770

Theophilus Sigefridus Bayerus (= G.S. Bayer), *Opuscula ad historiam antiquam [...] et rem numariam spectantia*, Halle (Christian Adolph Klotz/Johann Jakob Curt) 1770.

Beger 1696-1701

Lorenz Beger, *Thesaurus Brandenburgicus selectus [...]*, 3 vols., Berlin/Leipzig (Ulrich Liebperd/Johann Michael Rüdiger) 1696-1701.

Bibliothecæ Imperialis Petropolitanæ

Bibliothecæ Imperialis Petropolitanæ, pars 1-[4], [St Petersburg] (Imperial Academy of Sciences) 1742.

Bilfinger [1729]

Georg Bernhard Bilfinger, *Einrichtung der Studien Ihro Kayserl. Majest. Petri [...]*, [St Petersburg] (Imperial Academy of Sciences) [1729].

Boeckler 1661

Georg Andreas Boeckler, *Theatrum Machinarum novum [...]*, Nuremberg (Paul Fürst) 1661 (cf. edition Nuremberg 1703).

De Bruyn 1725

Cornelis de Bruyn, *Voyage de Corneille de Bruyn par la Moscovie en Perse et aux Indes Orientales*, Rouen (Charles Ferrand 1725).

Buxbaum 1728-1740

Johann Christian Buxbaum, *Plantarum minus cognitarum centuria 1 [-v] complectens plantas circa Byzantium & in Oriente observatas*, St Petersburg (Imperial Academy of Sciences) 1728-1740.

Bytmeister 1735

Heinrich Johann Bytmeister, *Bibliotecæ appendix sive Catalogus apparatus curiosorum artificialium et naturalium [...]*, [Helmstadt] (published by the author) 1735.

Chifflet and Capello 1678-1679

Claude Chifflet and Rudolfo Capello, *De antiquo nummo et præcipue romano liber posthumus, continens cheiragogiam accuratissimam [...] tertia ed. [...] auctus ea fini ut [...] Nummophylacium illud Luederianum Hamburgense [...]* Claude Chifflet prodit, accurate Rudolfo Capello, Hamburg (Georg Rebenlein/Michael Pfeiffer) 1678-1679.

Commelin 1697/1701

Johannes Commelin, *Horti medici Amstelodamensis rariorum tam Africanarum, quam utriusque Indiæ, aliarumque peregrinarum plantarum magno studio ac labore, sumptibus civitatis Amstelædamensis longa annorum serie collectarum, descriptio et icones ad vivum æri incisæ*, vol. 1, Amsterdam (Pieter & Joan Blaeu/Abraham van Someren) 1697; Casparus Commelin, *Idem*, vol. 11, Amsterdam (Pieter & Joan Blaeu/Widow Abraham van Someren) 1701.

Commentarii 1728-1751

Commentarii Academiae Scientiarum Imperialis Petropolitanæ 1 (1728)-14 (1751), St Petersburg (Imperial Academy of Sciences).

Georgi 1776-1780

Johann Gottlieb Georgi, *Beschreibung aller Nationen des Russischen Reichs [...]*, St Petersburg (Karl Wilhelm Müller) 1776-1780 (cf. Russian edition Georgi 1799).

Georgi 1777

Johann Gottlieb Georgi, *Merkwürdigkeiten verschiedener unbekannter Völker des Rüssischen Reichs*, Frankfurt am Main/Leipzig (s.n.) 1777.

Georgi 1799

Johann Gottlieb Georgi, *Opisanie vseh v Rossiiskom gosudarstve obitayushih narodov [...]* [The descriptions of all the nations inhabiting the Russian State (...)], St Petersburg (Imperial Academy of Sciences/Ivan Glazunov) 1799 (cf. German edition Georgi 1776-1780).

Gmelin 1747-1769

Johann Georg Gmelin, *Flora Sibirica sive Historia plantarum Sibiriae*, vols. 1-2, St Petersburg: Imperial Academy of Sciences, 1747-1749; Samuel Gottlieb Gmelin (ed.), *Idem*, vols. 3-4, St Petersburg (Imperial Academy of Sciences) 1768-1769.

Gori 1737-1743

Antonio Francesco Gori, *Museum Etruscum, exhibens insignia veterum Etruscorum monumenta, æreis tabulis 200 nunc primus edita et illustrata observationibus Antonii F. Gori [...]*, 3 vols., Florence (Caietanus Albizinius) 1737-1743.

Hermann and Delisle 1728

Jacob Hermann, Joseph Nicolas Delisle, *Abrégé des Mathématiques pour l'usage de Sa Majesté Imperiale de toutes les Russies [...]*, 3 vols., St Petersburg (Imperial Academy of Sciences) 1728.

Jacobaeus 1696

Oligerus Jacobaeus, *Museum Regium Seu Catalogus Rerum [...], Quæ In Basilica Bibliothecæ [...] Monarchæ Christiani Quinti Hafniæ asservantur*, Copenhagen (Joachim Schmetgen) 1696.

Kaau-Boerhaave 1757

Abraham Kaau-Boerhaave, *Historia altera anatomica infantis, cuius pars corporis inferior monstrosa*, St Petersburg (Imperial Academy of Sciences) 1757.

De La Motraye 1732

Aubrey de La Motraye, *Voyages en Anglois et en Francois d'A. de La Motraye en diverses provinces et places de la Prusse ducale et royale, de la Russie [...]*, The Hague (Adrien Moetjens) 1732 (2nd edition).

Leupold 1727

Jacob Leupold, *Theatrum Arithmetico-Geometricum, das ist: Schauplatz der Rechen- und Mess-Kunst, darinnen enthalten dieser beyden Wissenschaften nöthige Grund-Regeln und Handgriffe so wohl, als auch die unterschiedene Instrumente und Maschinen, welche Theils in der Ausübung auf den Papier, Theils auch im Felde besonderen Vorthail geben können*, Leipzig (published by the author/Johann Gottlieb Gleditsch) 1727.

Major 1674

Johann Daniel Major, *Unvorgreiffliches Bedencken von Kunst und Naturalien Kammern ins gemein*, 4 vols., Kiel (Joachim Reumann) 1674 (N.B. 1704 edition in: Valentini 1704).

Major 1692

Johann Daniel Major, *Bevölckertes Cimbrien, oder die zwischen Ost- und West-See gelegene halb-Insel Deutschlands, nebst dero Ersten Einwohnern und ihren eigendlichen durch viel und grosse Umwege geschehenen Ankunfft, summarischer Weise vorgestellet von J.D.M., Plön* (Tobias Schmidt) 1692.

Memoires pour l'histoire des sciences & des beaux arts

François Catrou et al. (ed.), *Memoires pour l'histoire des sciences & des beaux arts [...]*, January 1701- december 1767, Trévoux/Paris (Etienne Ganeau/ Jean Boudot et al.).

MIP

Musei Imperialis Petropolitani Vol. I-II, St Petersburg (Imperial Academy of Sciences) 1741-1745.

Du Molinet 1692

Claude Du Molinet, *Le Cabinet de la Bibliothèque de Sainte-Geneviève*, Paris (Antoine Dezallier) 1692.

Montfaucon 1719

Bernard de Montfaucon, *L'antiquité expliquée et représentée en figures*, 5 vols., Paris (Florentin Delaulne et al.) 1719.

Montfaucon 1724

Bernard de Montfaucon, *Supplement au livre de l'antiquité expliquée et représentée en figures*, 5 vols., Paris (widow Delaulne et al.) 1724.

Olearius 1666

Adam Olearius, *Die Gottorfische Kunstkammer [...]*, Schleswig (Johann Holwein) 1666.

Palaty Sankt-Peterburgskoy 1741/1744

[Johann Daniel Schumacher], *Palaty Sankt-Peterburgskoy Imperatorskoy Akademii nauk Biblioteki i Kunstkamery* [The Chambers of the St Petersburg Imperial Academy of Sciences, the Library and the Kunstkamera], St Petersburg (Imperial Academy of Sciences) 1741/1744 (cf. *Gebäude der Kayserlichen Academie der Wissenschaften, Bibliothec und Kunst-Cammer in St. Petersburg nebst einer kurzen Anzeige aller daselbst vorhandenen Kunst- und Natur-Sachen zum Gebrauch derjenigen, welche die Academie besehen wollen*, St Petersburg (Imperial Academy of Sciences) [1744]; *Conspectus ædium Imperialis Academiæ Scientiarum Petropolitanæ; nec non Bibliothecæ et Technophylacii; una cum summano indice rerum artificiosarum et naturalium ibi conservatarum, in eorum usus, qui ædes has invisere cupiunt*, St Petersburg (Imperial Academy of Sciences) [1744]).

Pallas 1776

Peter Simon Pallas, *Reise durch verschiedene Provinzen des Russischen Reichs* [...], Frankfurt am Main/Leipzig (J.G. Fleischer) 1776.

Pallas 1811

Peter Simon Pallas, *Zoographia Rosso-Asiatica* [...], St Petersburg (Imperial Academy of Sciences) 1811.

Preissler 1728-1731

Johann Daniel Preissler, *Die durch Theorie erfundene Practic, Oder Gründlich-verfasste Reguln deren man sich als einer Anleitung zu berühmter Künstlere Zeichen-Wercken bestens bedienen kan*, Nuremberg (published by the author) 1728-1731 (cf. Russian edition Preissler 1750).

Preissler 1750

Johann Daniel Preissler, *Osnovatelnya pravila ili Kratkoe rukovodstvo k risovalnomu hudozestvu* [...] [Basic Rules or Concise Manual of the Art of Drawing], St Petersburg (Imperial Academy of Sciences) 1750 (1st edition 1734; cf. German edition Preissler 1728-1731).

Quiccheberg 1565

Samuel Quiccheberg, *Inscriptiones vel Tituli Theatri amplissimi* [...], Munich (Adam Berg) 1565.

Rumphius 1705

Georg Everhard Rumphius, *D'Amboinsche rareitkamer* [...], Amsterdam (François Halma) 1705.

Scarabelli 1666

Pietro Francesco Scarabelli, *Museo ò galeria adunata dal sapere, e dello studio del Sig. Canonico Manfredo Settala*, Tortona (Sons of Eliseo Viola) 1666.

Seba 1734-1765

Albertus Seba, *Locupletissimi rerum naturalium thesauri accurata descriptio et iconibus artificiosissimis expressio, per universam physices historiam* [...], vols. 1-2, Amsterdam (Jacobus Wetstein/William Smith/Janssonius van Waesbergen) 1734-1735; vol. 3, Amsterdam (Janssonius van Waesbergen) 1758; vol. 4, Amsterdam (Johann Caspar Arkstee/Henricus Merkus/Petrus Schouten) 1765.

De Sepi 1678

Giorgio de Sepi, *Romani Collegii Societatis Jesu musæum celeberrimum*, Amsterdam (Janssonius van Waesbergen) 1678.

Strahlenberg 1730

Philipp Johann von Strahlenberg, *Das nord- und ostliche Theil von Europa und Asia* [...], Stockholm (published by the author) 1730.

Valentini 1704

Michael Bernhard Valentini, *Museum Museorum, oder Vollständige Schaübühne fremder Naturalien*, Frankfurt am Main (Johann David Zunner) 1704.

Vincent 1706/1715

Levinus Vincent, *Wonder-Tooneel der Nature, geopent in eene korte Beschrijvinge [...]*, Amsterdam (François Halma) 1706; *Het tweede deel of vervolg van het Wondertoneel der Natuur [...]*, Amsterdam (published by the author/Gerard Valk/Joannes van Leeuwen) 1715.

Weitbrecht 1742

Josias Weitbrecht, *Syndesmologia, sive historia ligamentorum corporis humani [...]*, St Petersburg (Imperial Academy of Sciences) 1742.

De Wilde 1703

Jacob de Wilde, *Gemmæ selectæ antiquæ [...]*, Amsterdam (published by the author) 1703.

Witsen 1692

Nicolaes Witsen, *Noord en Oost Tartarye [...]*, Amsterdam (s.n.) 1692.

Worm 1655

Ole Worm, *Museum Wormianum [...]*, Amsterdam (Lowijs en Daniel Elzevier) 1655.

SECONDARY SOURCES

Alekseeva 1973

T.V. Alekseeva (ed.), *Russkoe iskusstvo XVIII veka. Materialy i issledovaniya* [Eighteenth century Russian art. Materials and studies], Moscow 1973.

Alekseeva 1990

M.A. Alekseeva, *Gravyura Petrovskogo vremeni* [Engraving of the time of Peter the Great], Leningrad 1990.

Alekseeva et al. 1985

M.A. Alekseeva et al. (eds.), *Graviroval'naya palata AN XVIII v. Sbornik dokumentov* [The eighteenth-century Engraving Chamber of the Academy of Sciences. Collection of documents], Leningrad 1985.

Andreev 1947

A.I. Andreev, 'Osnovanie Akademii nauk v Peterburge [Founding of the Academy of Sciences in St Petersburg]', in: A.I. Andreev (ed.), *Petr Velikii*, Moscow/Leningrad 1947, pp. 284-333.

Appleby 1983

J.H. Appleby, 'Robert Erskine: Scottish pioneer of Russian natural history', in: *Archives of Natural History* 10-3 (1983), pp. 377-398.

Arapova 1989

T.B. Arapova, 'Kitsaiskie izdeliya khudozhestvennogo remesla v russkom inter'yere XVII–pervoy chetverti XVIII veka. (K istorii kul'turnykh kontaktov Kitaya i Rossii) [Chinese objects of arts and crafts in Russian eighteenth-century interior. (On the history of cultural contacts between China and Russia)]', in: *Trudy Gosudarstvennogo Ermitazha* 27 (1989), pp. 108-116.

Balsiger 1955

B.J. Balsiger, *An analytical consensus of early printed catalogues of post-mediaeval collections: Kunst- und Wunderkammern*, [Iowa City] 1955 (Reprint of dissertation).

Balsiger 1970

B.J. Balsiger, *The Kunst- und Wunderkammern: A catalogue raisonné of collecting in Germany, France and England, 1565-1750*, Pittsburgh 1970.

Bel'ayaev 1800

O. Bel'ayaev, *Kabinet Petra Velikogo* [Peter the Great's Study], St Petersburg 1800.

Bespiatykh 1997

Yu. Bespiatykh, *Peterburg Anny Ioannovny v inostrannykh opisaniyakh* [St Petersburg at the time of Anne Ioannovna as described by foreigners], St Petersburg 1997.

Black 1986

J.L. Black, G.-F. Müller and the Imperial Russian Academy, Kingston/Montreal 1986.

Boeseman et al. 1990

M. Boeseman, L.B. Holthuis, M.S. Hoogmoed, C. Smeenk, *Seventeenth-century drawings of Brazilian animals in Leningrad*, Leiden 1990 (Zoologische Verhandlungen 267).

Bogdanov 2003

A.P. Bogdanov, 'Ucheba tsarskikh detei xvii v. i izdaniya gosudarevykh tipografii [Education of the Tsar's children in the 17th century and the publications of the Tsar's printing houses]', in: E.L. Nemirovsky (ed.), *Fedorovskie chteniya* 2003, Moscow 2003, pp. 224-256.

Brather 1993

H.-S. Brather (ed.), *Leibniz und seine Akademie. Ausgewählte Quellen zur Geschichte der Berliner Sozietät der Wissenschaften 1697-1716*, Berlin 1993.

Brenea 1999

I.V. Brenea, *Istoriya Instrumental'noy palaty Peterburgskoy Akademii nauk (1724-1766)* [History of the tool-making chamber of the St Petersburg Academy of Sciences (1724-1766)], St Petersburg 1999.

Burke 1992

P. Burke, *The Fabrication of Louis XIV*, New Haven/London 1992.

Cracraft 1997

J. Cracraft, *The Petrine Revolution in Russian Imagery*, Chicago/London 1997.

Danzig 1965

B.M. Danzig, *Russkie putešestvenniki na Bližnem Vostoke* [Russian travellers in the Middle East], Moscow 1965.

Danzig 1973

B.M. Danzig, *Bližnii Vostok v russkoy nauke i literature* [The Middle East in Russian scholarship and literature], Moscow 1973.

Driessen 1996a

J. Driessen, *Tsaar Peter de Grote en zijn Amsterdamse vrienden*, Utrecht/Antwerp 1996.

Driessen 1996b

J.J. Driessen, *Tsar' Petr i ego gollandskie друз'ya* [Tsar Peter and his Dutch friends], St Petersburg 1996.

Driessen 1998

J.J. Driessen, 'Perepiska amsterdamskogo aptekarya Al'berta Seby s khraniteli-ami Peterburgskoy Kunstkamery [Correspondence of the Amsterdam pharmacist Albert Seba and the Curators of the St Petersburg Curiosity Chamber]', in: Kopaneva et al. 1998, pp. 72-89.

Driessen 2003

J. Driessen, 'Why and how the Kunstkamera in St. Petersburg bought objects at the auction of the second collection of the late Albert Seba in Amsterdam in 1752', in: N.P. Kopaneva and G.V. Vilinbakhov (eds.), *Yearbook of the Russian - Dutch scientific society*, 1, St Petersburg 2003, pp. 223-237.

Van Eeghen 1959

I.H. van Eeghen, 'De verzameling van Jacob de Wilde of het Museum Wildeanum op Keizersgracht 333', in: *Jaarboek Amstelodamum* 51 (1959), pp. 72-92.

Fanderbeck 1842

M. Fanderbeck, 'O sostoyanii prosveshcheniya v Rossii v 1725 g. [On the state of enlightenment in Russia in 1725]', in: *Syn Otechestva*, 1842, part 1, pp. 5-35.

Formozov 1968

A.A. Formozov, 'Iz istorii Kunstkamery [From the history of the Kunstkamera]', in: *Voprosy istorii* 5 (1968), pp. 214-216.

Freedberg 2002

D. Freedberg, *The Eye of the Lynx. Galileo, his Friends and the Beginnings of Modern Natural History*, Chicago/London 2002.

Gavrilova 1971

E.I. Gavrilova, 'O pervykh proektakh Akademii khudozhestv v Rossii [The first projects of the Academy of Arts in Russia]', in: T.V. Alekseeva (ed.), *Russkoe iskusstvo XVIII - pervoy poloviny XIX veka*, Moscow 1971, pp. 219-229.

Gavrilova 1973

E.I. Gavrilova, 'Lomonosov i osnovaniye Akademii khudozhestv [Lomonosov and the establishment of the Academy of Arts]', in: Alekseeva 1973, pp. 66-75.

Gavrilova 1983

E.I. Gavrilova, *Russkii risunok XVIII veka [Russian eighteenth-century drawing]*, Leningrad 1983.

Georgel 1994

C. Georgel, 'Petit histoire des livrets de musées', in: C. Georgel (ed.), *La jeunesse des musées. Les musées de France au XIXe siècle* (Exh. cat. Musée d'Orsay, Paris), Paris 1994, pp. 207-214.

Ginzburg 1953

V.V. Ginzburg, 'Anatomicheskaya kollektsiya F. Ruischa v sobraniyakh Petrovskoy Kunstkamery [F. Ruisch's anatomical collection of the Peter the Great Kunstkammer]', in: *Sbornik Muzeya antropologii i etnografii* 14 (1953), pp. 263-305.

Gize 1988

M.E. Gize, A.K. Nartov in *St Petersburg*, Leningrad 1988.

Gize 1993

M.E. Gize, 'Avtory illyustratsiy k "Teatrum machinarum" A.K. Nartova Pyotr Ermolayev i Mikhail Semyonov [Pyotr Ermolayev and Mikhail Semyonov, authors of the illustrations for the "Theatrum machinarum" by A.K. Nartov]', in: B.I. Ivanov (ed.), *K istorii nauki, iskusstva i tekhniki v pervoy polovine XVIII v. Tezisy dokladov konferentsii, posvyashchennoy 300-letiyu so dnya rozhdeniya A.K. Nartova* (1693-1756 gg.), St Petersburg 1993, pp. 29-30.

Grasser 1979

W. Grasser, *Medaillen und Plaketten*, Munich 1979.

Grivel 1985

M. Grivel, 'Le Cabinet du Roi', in: *Revue de la Bibliotheque Nationale* 18 (1985), pp. 36-57.

Grote 1994

A. Grote (ed.), *Macrocosmos in Microcosmo. Die Welt in der Stube. Zur Geschichte des Sammelns* 1450-1800, Opladen 1994.

Guerrier 1873

W. Guerrier, *Leibniz in seinen Beziehungen zu Russland und Peter dem Grossen: eine geschichtliche Darstellung dieses Verhältnisses nebst den darauf bezüglichen Briefen und Denkschriften*, St Petersburg 1873.

Hahn 1971

R. Hahn, *The anatomy of a scientific institution: the Paris Academy of Sciences*, 1666-1803, Berkeley (Ca.) 1971.

Haskell et al. 1996

F. Haskell et al. (eds.), *The Paper Museum of Cassiano dal Pozzo; a catalogue raisonné: drawings and prints in the Royal Library at Windsor Castle, the British Museum, the Institut de France and other collections*, vol. 1ff., London 1996ff.

Haupt et al. 1990

H. Haupt, Th. Vignau-Wilberg, E. Irblich, M. Staudiger, *Le Bestiaire de Rudolph II. Cod. Min. 129 et 130 de la Bibliothèque nationale d'Autriche*, Paris 1990.

Heikamp 1969

D. Heikamp, 'Le Musée des Offices au XVIIIe siècle, un inventaire dessiné', in: *L'oeil* 169 (1969), pp. 2-11, 74-80.

Hendrix 1997

L. Hendrix, 'Natural History Illustration at the Court of Rudolf II', in: E. Fučíková et al. (eds.), *Rudolf II and Prague. The Court and the City* (Exh. cat. Prague Castle, Prague), London 1997, pp. 157-171.

Hofmann 1971

J.E. Hofmann (ed.), *Briefe von Christian Wolff aus den Jahren 1719-1753: ein Beitrag zur Geschichte der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg*, Hildesheim 1971.

Impey and MacGregor 2001

O. Impey and A. MacGregor (eds.), *The Origins of Museums. The Cabinet of Curiosities in Sixteenth- and Seventeenth-Century Europe*, London 2001 (2nd edition; 1st edition 1985).

Iversen 1872

Yu.B. Iversen, *Medali na deyaniya imperatora Petra Velikogo* [Medals dedicated to Peter the Great], St Petersburg 1872.

Jansen 1993

D.J. Jansen, 'Samuel Quicchebergs "Inscriptiones": de encyclopedische verzameling als hulpmiddel voor de wetenschap', in: E. Bergvelt, D.J. Meijers, M. Rijnders (eds.), *Verzamelen. Van rariteitenkabinet tot kunstmuseum*, Heerlen/Houten 1993, pp. 57-76.

Kalyazina 1998

N.V. Kalyazina, 'K istorii zdaniya Petrovskoy Kunstkamery [On the history of the building of Peter the Great's Kunstkammer]', in: Kopaneva et al. 1998, pp. 58-71.

Kalyazina 2000

N.V. Kalyazina (ed.), *Iz istorii Petrovskikh kollektsii. Sbornik nauchnykh trudov pamyati N. V. Kalyazinoy* [From the history of Peter the Great's collections. Studies in the memory of N.V. Kalyazina], St Petersburg 2000.

Kaminskaya 2000

A.G. Kaminskaya, 'Khudozhniki Georg i Doroteya Gzel' v Peterburge [The artists George and Dorothy Gsell in St Petersburg]', in: Kalyazina 2000, pp. 84-117.

Ketelsen 1990

Th. Ketelsen, *Kunstlerviten, Inventare, Kataloge. Drei Studien zur Geschichte der kunsthistorischen Praxis*, Ammersbek bei Hamburg 1990.

Kniaz'kov 1991

S. Kniaz'kov, *Iz prroshlogo russkoy zemli. Vrem'a Petra Velikogo* [From the past of Russia. The time of Peter the Great], Moscow 1991.

Kolchinsky 2000

E.I. Kolchinsky (ed.), *Vo glave pervenstvuyushchego uchenogo sosloviya Rossii. Ocherki zhiznii deyatel'nosti prezidentov Imperatorskoy Sankt-Peterburgskoy Akademii nauk. 1725-1917* [At the head of Russia's chief learned corporation. Essays on the life and work of the presidents of St Petersburg Imperial Academy of Sciences. 1725-1917], St Petersburg 2000.

Komelova 1977

G.N. Komelova (ed.), *Kul'tura i iskusstvo petrovskogo vremeni. Publikatsii i issledovaniya* [Culture and art of the time of Peter the Great. Publications and studies], Leningrad 1977.

Komelova 1996a

G.N. Komelova, 'Gravyury [Engravings]', in: Exh. cat. St Petersburg 1996, p. 25.

Komelova 1996b

G. Komelova, 'Adriaan Schoonebeeck en Aleksej Zoebov. Een Nederlandse graveur en zijn Russische leerling', in: Exh. cat. Amsterdam 1996, pp. 87-93.

Kopanev 1988

N.A. Kopanev, *Frantsuzskaia kniga in russkaia kul'tura v seredine 18 veka* [The French book in mid-eighteenth century Russian culture], Leningrad 1988.

Kopanev 1991

N.A. Kopanev, 'Russkie sv'azi izdatel'skoy firmy Jansson-Vesverg [Russian connections of the Jansson-Waesberg Firm]', in: A.A. Zaitseva (ed.), *Kniga v Rossii: problemy istochnikovedeniia i istoriografii*, St Petersburg 1991, pp. 107-121.

Kopanev and Kopaneva 2003

N.A. Kopanev and N.P. Kopaneva, 'Iz istorii pervykh izdaniy Peterburgskoy Akademii nauk [From the history of the first editions of the St Petersburg Academy of Sciences]', in: E.L. Nemirovsky (ed.), *Fedorovskie chteniya 2003*, Moscow 2003, pp. 318-331.

Kopaneva 1996

N.P. Kopaneva, 'Kunstkamera Petra I [Peter the Great's Kunstkammer]', in: Exh. cat. St Petersburg 1996, pp. 18-19.

Kopaneva et al. 1998

N. Kopaneva, R. Kistemaker, A. Overbeek (eds.), *Petr I i Gollandiya: Russko-gollandskie nauchnye i khudozhestvennye svyazi v yepokhu Petra Velikogo* [Peter the Great and Holland: Russo-Dutch scientific and cultural links at the time of Peter the Great. Collection of papers], St Petersburg 1998.

Kopelevich 1977

Yu.Kh. Kopelevich, *Osnovanie Petersburgskoy Akademii nauk* [The establishment of the Academy of Sciences], Leningrad 1977.

Kopelevich 1978

Yu.Kh. Kopelevich, 'Vvodnaya rech I. Veisbrehta k ego kursu anatomii, chitanomu v Peterburgskoy Akademii nauk v 1737 g. [J. Weisbrecht's introductory speech to his anatomy course taught at the St Petersburg Academy of Sciences in 1737]', in: *Istoriko-biologicheskie issledovaniya 7* (1978), pp. 143-144.

Kopelevich and Nevskaya 2000

Yu.Kh. Kopelevich and N.I. Nevskaya, 'Na puti k sozdaniyu Akademii nauk [On the way to creating the Academy of Sciences]', in: N.I. Nevskaya (ed.). *Letopis' Rossiiskoy Akademii nauk*, vol. 1 (1724-1802), St Petersburg 2000, pp. 15-30.

Kube 1925

A.N. Kube, *Gos. Ermitazh. Reznaya kost'* [The State Hermitage. Carved bone], Leningrad 1925.

Lebedeva 1996

I.N. Lebedeva, 'De nalatenschap van Maria Sibylla Merian in Sint-Petersburg', in: Exh. cat. Amsterdam 1996, pp. 60-66.

Levinson-Lessing 1985

V.F. Levinson-Lessing, *Istoriya kartinnoy galerei Ermitazha (1764-1917)* [The history of the Hermitage picture gallery (1764-1917)], Leningrad 1985.

Lhotsky 1941-1945

A. Lhotsky, *Die Geschichte der Sammlungen. Festschrift des Kunsthistorischen Museums zur Feier des fünfzigjährigen Bestandes*, 3 vols., Vienna 1941-1945.

Lipman 1945

A. Lipman, *Petrovskaya Kunstkamera. Arkhitekturno-istoricheskii ocherk* [Peter the Great's Kunstkammer. Architecture and history], Moscow/Leningrad 1945.

Lipsky 1913

V.I. Lipsky, 'Istoricheskiy ocherk imperatorskogo Sankt-Peterburgskogo Botanicheskogo Sada [History of the Imperial St Petersburg Botanic Gardens]', in: A.A. Fischer von Waldheim (ed.), *Imperatorskii Sankt-Peterburgskii Botanicheskii Sad za 200 let ego sushchestvovaniya*, vol. 1, St Petersburg 1913, pp. 1-297.

Liven 1901

G.E. Liven, *Imperatorskii Ermitazh. Putevoditel' po kabinetu Petra Velikogo i Galeree dragotsennostey* [The Imperial Hermitage. A guide to Peter the Great's study and the Gallery of Antiquities], St Petersburg 1901.

Logan 1979

A.-M.S. Logan, *The 'cabinet' of the brothers Gerard and Jan Reynst*, Amsterdam/Oxford/New York 1979.

Luyendijk-Elshout 1998

A.M. Luyendijk-Elshout, 'Moralisticheskoe znachenie kollektsii Frederika Ruischa [Moralistic significance of Frederick Ruisch's collection]', in: Kopaneva *et al.* 1998, pp. 114-126.

Macgregor 2000

A. Macgregor, *Manuscript Catalogues of the Early Museum Collections 1683-1886*, Oxford 2000.

Malinovsky 1987

K.V. Malinovsky, 'Pis'ma F.V. Bergkhol'tsa k Ya. Shtelinu o kollektsionirovanii gravyr. K istorii sobraniya gravyr Ermitazha [F.V. Bergholz's letters to Jakob Stählin on collecting engravings. For the history of the Hermitage collection of engravings]', in: *Muzey* 7 (1987), pp. 253-262.

Malinovsky 1990a

K.V. Malinovsky (ed.), *Zapiski Ya. Shtelina ob izyashchnykh iskusstvakh v Rossii* [Jakob Stählin's notes on the fine arts in Russia], 2 vols., Moscow 1990.

Malinovsky 1990b

K.V. Malinovsky, 'Yakob Shtelin, zhizn' deyatel'nost [Jakob Stählin: his life and works]', in: Malinovsky 1990a, vol. 1, pp. 7-28.

Massie 1980

R. Massie, *Peter the Great. His life and world*, New York 1980.

Materialy 1885-1900

Materialy dlya istorii Imperatorskoy Akademii nauk [Materials for the history of the Imperial Academy of Sciences], 10 vols., St Petersburg 1885-1900.

Matveev 2002

V.Yu. Matveev, 'Nauchno-tekhnicheskie raritety iz sobraniya Petra I: astronomicheskie chasy 1584 goda [Scientific and technological rarities from Peter the Great's collection: 1584 astronomical clock]', in: *Pinakoteka* 15 (2002), pp. 22-27.

Matveev and Yastrebinskij 2002

V.Yu. Matveev and G.B. Yastrebinskij, 'Izmeritel'nye instrumenty iz memorial'noy kollekcii Petra Velikogo [Measuring instruments from Peter the Great's memorial collection]', in: *Pinakoteka* 15 (2002), pp. 28-32.

Meijers 1996

D.J. Meijers, 'De Kunstkamera van Peter de Grote. De Nederlandse bijdrage aan een nieuw type museum', in: Exh. cat. Amsterdam 1996, pp. 22-36.

Meijers 1998

D.J. Meijers, 'Kunstkamera Petra Velikogo. Niderlandskii vklad v sozdanie muzeya novogo tipa [Peter the Great's Kunstammer. The Dutch contribution to the formation of the museum of a new type]', in: Kopaneva *et al.* 1998, pp. 28-57.

Meijers 2003

D.J. Meijers, 'Sir John Sloane and the European Proto-Museum', in: M. Caygill, A. MacGregor, L. Syson (eds.), *Enlightening the British: Knowledge, Discovery and the Museum in the 18th Century*, London 2003, pp. 11-17.

Meijers and Van de Roemer 2003

D.J. Meijers and B. van de Roemer, 'Ein "gezeichnetes Museum" und seine Funktion damals und heute', in: Exh. cat. Dortmund/Gotha 2003, pp. 168-182.

Menshikova 2000

M.L. Menshikova, 'Ya.V. Bryus i ego kitajskie kollekcii [J.W. Bruce and his Chinese collections]', in: G.V. Vilinbakhov (ed.), *Petrovskoe vremya v litsakh*, St Petersburg 2000, pp. 34-40.

Moiseeva 2000

T.M. Moiseeva, 'Petrovskaya Kunstkamera v kontekste zapadnoevropeyskikh muzeev 16-18 vekov [Peter the Great's Kunstammer in the context of 16th - 18th-century Western European museums]', in: *Sbornik MAE imeni Petra Velikogo* 48 (2000), pp. 24-34.

Moleva and Belyutin 1956

N.M. Moleva and E.M. Belyutin, *Pedagogicheskaya sistema Akademii khudozhestv XVIII veka* [The pedagogical system of the Academy of Arts in the 18th century], Moscow 1956.

Moleva and Belyutin 1965

N.M. Moleva and E.M. Belyutin, *Zhivopisnykh del mastera* [Masters of painting], Moscow 1965.

De Montesquiou-Fezensac and Gaborit-Chapin 1977

B. de Montesquiou-Fezensac and D. Gaborit-Chapin, *Le Trésor de St.-Denis*, vol. III, Paris 1977.

Müsch et al. 2001

I. Müsch, J. Rust, R. Willmann, *Albertus Seba. Cabinet of Natural History. Locupletissimi rerum naturalium thesauri 1734-1765. Based on the copy in the Koninklijke Bibliotheek*, The Hague/Cologne 2001.

Neverov 1977

O.Ya. Neverov, 'Pamyatniki antichnogo iskusstva v Rossii Petrovskogo vremeni [Monuments of the art of Classical Antiquity in Russia at the time of Peter the Great]', in: Komelova 1977, pp. 37-53.

Neverov 1998a

O.Ya. Neverov, 'Istoriya osnovnykh kollektsiy Kunstkamery Petra I [History of the major collections of Peter the Great's Kunstkammer]', in: Kopaneva *et al.* 1998, pp. 9-27.

Neverov 1998b

O.Ya. Neverov, 'Sobranie redkostey Petrovskoy Kunstkamery [Collection of rarities of Peter the Great's Kunstkammer]', in: Kopaneva *et al.* 1998, pp. 127-141.

Neverov 2001

O. Neverov, "'His Majesty's Cabinet" and Peter I's Kunstkammer', in: Impey and MacGregor 2001, pp. 71-79.

Nissen 1951

K. Nissen, *Die botanische Buchillustration: ihre Geschichte und Bibliographie*, 2 vols., Stuttgart 1951.

Nissen 1969-1978

K. Nissen, *Die zoologische Buchillustration: ihre Bibliographie und Geschichte*, 2 vols., Stuttgart 1969-1978.

Novikov 1957

P.A. Novikov, 'Zoologicheskii otdel Peterburgskoy Kunstkamery v ego istoricheskom razvitii [The zoological department of Peter the Great's Kunstkammer and its development]', in: *Trudy Instituta istorii estestvoznaniya i tekhniki* 14-2 (1957), pp. 302-352.

Novlianskaya 1970

M.G. Novlianskaya, *Daniil Gottlieb Messerschmidt i ego raboty po issledovaniyu Sibiri* [Daniel Gottlieb Messerschmidt and his works on Siberian studies], Leningrad 1970.

Olmi 1976

G. Olmi, *Ulisse Aldrovandi: Scienza e natura nel secondo cinquecento*, Trento 1976.

Olmi 2000

G. Olmi, 'L'illustrazione naturalistica nelle opere di Luigi Ferdinando Marsigli', in: G. Olmi, L. Tongiorgi Tomas, A. Zanca (eds.), *Natura-cultura: l'interpretazione del mondo fisico nei testi e nelle immagini. Atti del convegno internazionale di studi*, Florence 2000 (Accademia nazionale Virgiliana di Scienze Lettere e Arti - Miscellanea, vol. 8), pp. 255-303.

Olmi 2001a

G. Olmi, 'Science – Honour – Metaphor: Italian Cabinet of the Sixteenth and Seventeenth Centuries', in: Impey and MacGregor 2001, pp. 1-17.

Olmi 2001b

G. Olmi, 'Museums on paper in Emilia-Romagna from the sixteenth to the nineteenth centuries: from Aldrovandi to Count Sanvitale', in: *Archives of Natural History* 28-2 (2001), pp. 157-178.

Ostrovityaninov 1958-1964

K.V. Ostrovityaninov (ed.), *Istoriya Akademii nauk SSSR* [History of the Academy of Sciences of the U.S.S.R.], 3 vols., Moscow 1958-1964.

Ovenell 1986

R.F. Ovenell, *The Ashmolean Museum. 1683-1894*, Oxford 1986.

Pekarsky 1862

P.P. Pekarsky, *Nauka i literatura v Rossii pri Petre Velikom* [Science and literature in Russia at the time of Peter the Great], 2 vols., St Petersburg 1862.

Pekarsky 1865

P.P. Pekarsky, 'Otchet o zan'atijax v 1863-1864 [Report of the 1863-864 studies]', in: *Zapiski Akademii nauk* 7 (1865), supplement, pp. 1-72.

Pekarsky 1870-1873

P.P. Pekarsky, *Istoriya Imperatorskoy Akademii nauk v Peterburge* [History of the Imperial Academy of Sciences in St Petersburg], 2 vols., St Petersburg 1870-1873.

Pobedinskaya 2000

A.G. Pobedinskaya, 'Gollandskie kartiny iz kolleksii Kunstkamery [Dutch paintings from the Kunstkammer collection]', in: *Kalyazina 2000*, pp. 146-163.

Pronina 1973
I.A. Pronina, 'O prepodavanii dekorativno-prikladnogo iskusstva v XVIII v. [On teaching decorative and applied arts in the eighteenth century]', in: *Alekseeva 1973*, pp. 76-89.

Pronina 1983

I.A. Pronina, *Dekorativnoe iskusstvo v Akademii khudozhestv. Iz istorii russkoy khudozhestvennoy shkoly XVIII - pervoy poloviny XIX veka* [Decorative art at the academy of Arts. From the history of the Russian art school in the eighteenth and the first half of the nineteenth centuries], Moscow 1983.

Radlov 1888-1902

V.V. Radlov, *Sibirskie drevnosti* [Siberian antiquities], St Petersburg 1888, 1891, 1894, 1902 (Materialy po arkheologii Rossii, nos. 3, 5, 15, 27).

Radzyun 1988

A.B. Radzyun, 'Frederik Ruisch i ego anatomicheskaya kolleksiya v Muzee antropologii i etnografii [Frederik Ruisch and his anatomical collection in the Museum of Anthropology and Ethnography]', in: *Sovetskaya etnografiya* 6 (1988), pp. 90-113.

Radzyun 1998

A.B. Radzyun, 'Anatomicheskaya kolleksiya F. Ruisha v Sankt-Peterburge [F. Ruisch's anatomical collection in St Petersburg]', in: *Kopaneva et al. 1998*, pp. 90-113.

Rovinsky 1855

D.A. Rovinsky, 'Akademiya khudozhestv do vremen imperatritsy Ekateriny II [Academy of Arts until the time of the Empress Catherine the Great]', in: *Otechestvennyie zapiski* 102 (oct. 1855), pp. 46-76.

Rudenko 1962

S.I. Rudenko, *Sibirskaya kolleksiya Petra I* [Peter the Great's Siberian collection], Moscow/Leningrad 1962 (Arkheologiya SSSR. Svod arkheologicheskikh istochnikov, Issue D3).

Safranovskii 1967

K.I. Safranovskii, 'Les Salles de l'Académie des Sciences de Saint-Petersbourg en 1741. Histoire d'un livre condamné', in: *Cahiers du monde Russe et Soviétique* 8-4 (1967), pp. 604-615.

Sauvy 1973

A. Sauvy, 'L'illustration d'un règne: le Cabinet du Roi et les projets encyclopédiques de Colbert', in: *L'art du livre à l'Imprimerie nationale*, Paris 1973, pp. 103-127.

Savel'eva and Kopanev 1989

E.A. Savel'eva and A.I. Kopanev (eds.), *Biblioteka Ya. V. Bryusa. Katalog* [Jacob Bruce's library. Catalogue], Leningrad 1989.

Schnapp 1996

A. Schnapp, *The discovery of the past. The origins of archeology*, London 1996.

Schnapper 1995

A. Schnapper, 'Tourisme et bien public: à propos des catalogues de musées à la fin du XVIII^e siècle', in: E. Pommier (ed.), *Les Musées en Europe à la veille de l'ouverture du Louvre*, Paris 1995, pp. 615-629.

Schulte-Albert 1972

H.G. Schulte-Albert, *Leibniz's plans for a world encyclopædia system*, Ann Arbor (Mi.) 1972 (dissertation Case Western Reserve University).

Shafranovskaya 1965

T.K. Shafranovskaya, 'O sokrovishchakh Petrovskoy Kunstkamery (po risunkam XVIII veka) [The treasures of Peter the Great's Kunstkammer (on the basis of eighteenth-century drawings)]', in: *Sovetskaya etnografiya* 2 (1965), pp. 137-156.

Shafranovskaya 1969

T.K. Shafranovskaya, 'Iz istorii kitaiskikh kollektzii Kunstkamery [From the history of the Kunstkammer Chinese collection]', in: *Sbornik Muzeya antropologii i etnografii. Kul'tura narodov zarubezhnoy Azii i Okeanii*, vol. 25, Leningrad 1969, pp. 5-28.

Shuchukina 1994

E.S. Shuchukina, 'For whom do the initials 'OK' and 'KO' stand?', in: *Journal of the Russian Numismatic Society* 54 (1994), pp. 36-45.

Sidorov 1956

A.A. Sidorov, *Risunok starykh russkikh masterov* [Drawings by old Russian masters], Moscow 1956.

Skachkov 1977

P.E. Skachkov, *oчерki istorii russkogo kitavevaniya* [Notes on the history of Russian sinology], Moscow 1977.

Smit 1994

P. Smit, 'Die Ostindische Kompanie und das holländische Naturalienkabinett', in: Grote 1994, pp. 799-816.

Sokolov and Parnes 1993

V.E. Sokolov and J.A. Parnes, *U istokov russkoy teriologii* [The sources of Russian teriology], Moscow 1993.

Spasskiy 1977

I.G. Spasskiy, 'Na zare russkoy numizmatiki [At the dawn of Russian numismatics]', in: Komelova 1977, pp. 54-62.

Stanyukovich 1953

T.V. Stanyukovich, *Kunstkamera Peterburgskoy Akademii nauk* [Kunstkammer of St Petersburg Academy of Sciences], Moscow/Leningrad 1953.

Stanyukovich 1958

T.V. Stanyukovich, 'Khudozhestvennoe ubranstvo i razmeshchenie ekspozitsii Peterburgskoy Kunstkamery [Artistic decoration and arrangement of the exhibition of the St Petersburg Kunstkammer]', in: *Sbornik Muzeya antropologii i etnografii* 16 (1958), pp. 385-400.

Stanyukovich 1964

T.V. Stanyukovich, 'Muzey antropologii i etnografii za 250 let [The Museum of Anthropology and Ethnography during 250 years]', in: *Sbornik Muzeya antropologii i etnografii* 22 (1964), pp. 5-150.

Staudinger 1990

M. Staudinger, 'Étude descriptive de zoologie historique', in: Haupt *et al.* 1990, pp. 92-486.

Staudinger and Irblich 1996

M. Staudinger and E. Irblich, 'Naturstudien Kaiser Rudolfs II. (1576-1612). Zur Kunstkammer auf der Prager Burg', in: Exh. cat. Vienna 1996, pp. 229-286.

Steckner 1994

C. Steckner, 'Das Museum Cimbricum von 1688 und die cartesianische "Perfection des Gemüthes". Zur museumswissenschaft des Kieler Universitätsprofessors Johann Daniel Major (1634-1693)', in: Grote 1994, pp. 603-628.

Stepanov 1966

N.N. Stepanov (ed.), S.P. *Krasheninnikov v Sibiri. Neopublikovannye materialy* [S.P. Krasheninnikov in Siberia. Unpublished materials], Moscow/Leningrad 1966.

Stetskevich 1997

E.S. Stetskevich, 'Khudozhniki Akademii nauk i Kunstkamery v XVIII veke [Artists of the Academy of Sciences and the Kunstkammer in the eighteenth century]', in: *Kunstkamera. Etnograficheskie tetradi* 11 (1997), pp. 248-267.

Stübel 1925

M. Stübel, 'Deutsche Galeriewerke und Kataloge des 18. Jahrhunderts', in: *Monatshefte für Bücherfreunde und Graphiksammler* 1 (1925), pp. 247-254, 301-311.

Svodnyi katalog russkoy knigi XVIII veka 1966

I.P. Kondakov et al. (eds.), *Svodnyi katalog russkoy knigi grazhdanskoy pechati XVIII veka* [Complete Catalogue of Russian Eighteenth-century Secular Books], vol. IV, Moscow 1966.

Sytin 2003

A.K. Sytin, 'Botanicheskie risunki Petrovskoy Kunstkamery i J.Ch. Buxbaum [Botanical drawings of the Peter the Great Kunstkamera and J.Ch. Buxbaum]', in: R. Kistemaker, N. Kopaneva, D. Meijers, G. Vilinbakhov (eds.), "Narisovannyy muzei" *Peterburgskoy Akademii nauk*. 1725-1760, St Petersburg 2003, pp. 123-125.

Thomas 1988

C.G. Thomas, 'Sir Hans Sloane and the Russian Academy of Sciences', in: *British Library Journal* 14 (1988), pp. 21-37.

Vignau-Wilberg 1990

T. Vignau-Wilberg, 'Le "Musée de l'empereur Rodolphe II" et le Cabinet des arts et curiosités', in: Haupt et al. 1990, pp. 31-63.

Völkel 2001

M. Völkel, *Das Bild vom Schloss. Darstellung und Selbstdarstellung deutscher Höfe in Architekturstichserien 1600-1800*, Munich/Berlin 2001.

Van der Waals 1988

J. van der Waals, *De prentschat van Michiel Hinloopen. Een reconstructie van de eerste openbare papierkunstverzameling in Nederland* (Exh. cat. Rijksprentenkabinet, Rijksmuseum, Amsterdam), The Hague 1988.

Van der Waals 1992

J. van der Waals, 'Exotische rariteiten. Afbeeldingen van voorwerpen van vreemde volkeren', in: Exh. cat. Amsterdam 1992a, pp. 153-168.

Werrett 2000

S.R.E. Werrett, *The St. Petersburg Academy of Sciences in Enlightened Russia*, Berlin 2000.

Wijnands 1983

D.O. Wijnands, *The botany of the Commelins. A taxonomical, nomenclatural and historical account of the plants depicted in the Moninckx Atlas and in the four books by Jan and Caspar Commelin on the plants in the Hortus Medicus Amstelodamensis 1682-1710*, Rotterdam 1983.

Wilson et al. 2002

M.L. Wilson, Th. Toussaint van Hove Exalto, W.J.J. van Rijssen, *Codex Witsenii. Annotated watercolours of landscapes, flora and fauna observed on the expedition to the Copper Mountains in the country of the Namaqua undertaken in 1685-6 by Simon van der Stel, Commander at the Cape of Good Hope. Copied at the Cape in 1692 for Nicolaas Witsen, Mayor of Amsterdam, Member of the Amsterdam Chamber of the Dutch East India Company, Ambassador to Great Britain, &c, &c.*, Cape Town 2002.

Wolff 1973

C.F. Wolff, *Predmety razmyshleniy v svyazi s teoriey urodstv* [Subjects for contemplation in connection with the theory of monstrosities], Leningrad 1973.

Yur'yev 1981

K.B. Yur'yev, 'Albert Seba i ego rol' v razvitii gerpetologii [Albert Seba and his role in the development of herpetology]', in: *Trudy Zoologicheskogo instituta AN SSSR* 101 (1981), pp. 109-120.

Zabelin 1915

I.E. Zabelin, *Domashnii byt russkikh tsarei* [Everyday life of the Russian Tsars], part II, Moscow 1915.

Zavitukhina 1977

M.P. Zavitukhina, 'K voprosu o vremeni i meste formirovaniya Sibirskoy kollektsii Petra I [The date and place of the formation of Peter the Great's Siberian collection]', in: Komelova 1977, pp. 63-69.

Zavitukhina 2000

M.P. Zavitukhina, 'Petr I i Sibirskaya kollektsiya Kunstkamery [Peter the Great and the Siberian collection of the Kunstkammer]', in: Kalyazina 2000, pp. 14-26.

Zimmermann 1929

H. Zimmermann, *Lukas Cranach d. Ä.: Folgen der Wittenberger Heiltümer und die Illustrationen des Rhau'schen Hortulus animæ*, Halle 1929.

EXHIBITION CATALOGUES

Amsterdam 1992a

E. Bergvelt and R. Kistemaker (eds.), *De wereld binnen handbereik. Nederlandse kunst- en rariteitenverzamelingen, 1585-1735* (Amsterdams Historisch Museum, Amsterdam), 2 vols., Zwolle 1992.

Amsterdam 1992b

R. van Gelder and J. van der Waals, *Een wereldreiziger op papier. De atlas van Laurens van der Hem (1621-1678)* (Koninklijk Paleis, Amsterdam), s.l. 1992.

Amsterdam 1992c

K. Gnirrep (ed.), *Voor de Kruid-Lievende Leser. De Bibliotheek van de Amsterdamse Hortus in de 17e en 18e eeuw* (Universiteitsbibliotheek, Universiteit van Amsterdam, Amsterdam), Amsterdam 1992.

Amsterdam 1996

R. Kistemaker, N. Kopaneva, A. Overbeek (eds.), *Peter de Grote en Holland. Culturele en wetenschappelijke betrekkingen tussen Rusland en Nederland ten tijde van tsaar Peter de Grote* (Amsterdams Historisch Museum, Amsterdam), Bussum 1996 (cf. Exh. cat. St Petersburg 1996).

Bonn 1994

A. Becker (ed.), *Wunderkammer des Abendlandes. Museum und Sammlung im Spiegel der Zeit* (Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, Bonn), Bonn 1994.

Braunschweig 2000

Weltenharmonie. Die Kunstkammer und die Ordnung des Wissens (Herzog Anton Ulrich-Museum, Braunschweig), Braunschweig 2000.

Delft 2002

E. Bergvelt, M. Jonker, A. Wiechmann (eds.), *Schatten in Delft. Burgers verzamelen 1600-1750* (Stedelijk Museum Het Prinsenhof, Delft), Zwolle 2002.

Dortmund/Gotha 2003

B. Buberl and M. Dutschershoff (eds.), *Palast des Wissens. Die Kunst- und Wunderkammer Zar Peters des Grossen* (Museum für Kunst und Kulturgeschichte, Dortmund/Schlössermuseum, Gotha), 2 vols., Munich 2003.

Halle 1996

W. Hintzsche and Th. Nickol (eds.), *Die grosse nordische Expedition. Georg Wilhelm Steller (1709-1746); ein Lutheraner erforscht Sibirien und Alaska* (Frankesche Stiftungen, Halle), Gotha 1996.

Münster 1976

G. Langemeyer, R. Schleier (eds.), *Bilder nach Bildern. Druckgraphik und die Vermittlung von Kunst* (Westfälisches Landesmuseum für Kunst und Kulturgeschichte, Münster), Münster 1976.

Paris 1996

R. Schaer (ed.), *Tous les savoirs du monde. Encyclopédies et bibliothèques de Sumer au XXI^e siècle* (Bibliothèque Nationale de France, Paris), Paris 1996.

St Petersburg 1992

Iz kolleksii Petrovskoy kunkamery [From the collection of Peter the Great's kunstkammer] (The State Hermitage, St Petersburg), St Petersburg 1992.

St Petersburg 1993

M.B. Piotrovsky (ed.), *Teatrum Machinarum, ili Tri epokhi iskusstva rez'by po kosti v Sankt-Peterburge* [Teatrum Machinarum, or three epochs of the art of carving in St Petersburg] (The State Hermitage, St Petersburg), St Petersburg 1993.

St Petersburg 1996

Petr I i Gollandiya. Russko-gollandskie khudozhestvennye nauchnye svyazi [Peter the Great and Holland: Russo-Dutch scientific and cultural links at the time of Peter the Great] (The State Hermitage, St Petersburg), St Petersburg 1996 (cf. Exh. cat. Amsterdam 1996).

St Petersburg 2003

M.B. Piotrovsky (ed.), *Osnovatelyu Peterburga. Katalog Vystavki* [The Foundation of St Petersburg. Exhibition catalogue] (The State Hermitage, St Petersburg), St Petersburg 2003.

Vienna/Innsbruck 1995

A. Auer and E. Irblich (eds.), *Natur und Kunst. Handschriften und Alben aus der Ambrasers Sammlung Erzherzog Ferdinands II. (1529-1595)* (Kunsthistorisches Museum, Vienna/Österreichische Nationalbibliothek, Vienna/Schloß Ambras, Innsbruck), Vienna 1995.

Vienna 1996

E. Irblich (ed.), *Thesaurus Austriacus: Europas Glanz im Spiegel der Buchkunst, Handschriften und Kunstalben von 800 bis 1600* (Österreichische Nationalbibliothek, Vienna), Vienna 1996.

Vienna 2001

H.W. Lack, *Ein Garten Eden. Meisterwerke der botanischen Illustration* (Österreichische Nationalbibliothek, Vienna), Cologne 2001.

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