should doubtlessly indicate that the pre-XVII century history of the Russian Church is known to us rather badly, and likely to be seriously distorted. The Romanovs must have done their best to conceal the former proximity (or even unity) of the Orthodox faith and Islam in the epoch of the XIV-XVI century. Below we shall provide even more examples testifying to this fact.

Let us turn to the famous oeuvre of Afanasiy Nikitin entitled "The Voyage beyond the Three Seas" ([929]). It is known to have been "found by N. M. Karamzin in the library of the Troitse-Sergiyev monastery as part of a XVI century almanac of chronicles that he called 'The Troitskaya Chronicle'" ([929], page 131). Several other copies have been found since then; there are six of them known to date. The Troitskiy copy is considered the oldest; we shall be referring to this very copy, which was found in the library of the most important monastery in Russian history.

Let us just cite some of the most illustrative passages. The text begins with the words: "Lord Jesus Christ, have mercy upon thy humble subject, Afanasiy Nikitin, and may all the saints pray for me" ([929], page 9). The text was therefore written by the representative of the Orthodox faith. The "Voyage" is written in Russian for the most part; however, Afanasiy Nikitin occasionally lapses into Turkic or Arabic with apparent ease, and then continues in Russian just as effortlessly. Obviously, the author and his intended audience had been multi-lingual. However, the most important thing is that the Turkic, or Arabic, language is used by Afanasiy Nikitin in Orthodox Russian prayers – or Orthodox-Islamic ones, odd as the formula might strike us nowadays.

"The entire populace of India has the custom of congregating at the *butkhan* ... the numbers of people *azar lek vakht bashet sat azare lek*. There is a large effigy of But [Buddha] at the *butkhan*, carved in stone and resembling Justinian of Czar-Grad with a spear in his hand" ([929], page 18). Nikitin's text contains a passage in Persian ("*azar lek vakht bashet sat azare lek*"), which translates as "the numbers of people amounting to a thousand *leks*, and sometimes to hundreds of thousands" ([929], page 177). There are no obvious reasons why Nikitin should use Persian here – he is neither quoting, nor trying to convey the local spirit in this manner. He merely tells us of his im-

pressions, occasionally lapsing into Persian (yet using Cyrillic characters for the transcription of the Persian words).

By the way, the fact that the statue of Buddha should wield a spear and resemble the effigy of Justinian, the Byzantine emperor leads us to the theory that the Indian "Buddha cult" had partially incorporated the cult of Batu-Khan, the great conqueror, hence the use of the word *butkhan* (Batu-Khan).

Another Arabic passage is as follows: "On Mondays they eat once a day. In India *kak pachektur, a uchuzeder: sikish ilarsen iki shithel; akechany illa atyrsenyatle zhetel ber; bulara dostor: a kul karavash uchuz char funa hub bem funa khubesia; kapkara am chuk kichi khosh.* Then I left Parvati and went to Beder" ([929], page 19).

Yet another example is one of the numerous prayers wherein Afanasiy Nikitin uses Turkic, Persian or Arabic alongside the Russian language: "Lord Almighty, the creator of Heaven and the Earth! Do not turn thy face away from thy slave, for sorrows ensnare me. Oh Lord, turn thy eye towards me and have mercy upon me, for I am thy creature; do not let me astray, oh Lord, and lead me to thy path of righteousness, even though there is little virtue left in me in this time of need, and I wallow in ways of evil all these days, oh Lord Allah, karim Allah, rahym Allah, Karim Allah, rahymelloh; Akhalim dulimo. I have spent 4 Great Days in the land of the basurmans [non-believers, those of a different faith - Transl.], yet I remain true to the Christian faith; Lord only knows what may happen next" ([929], page 24).

Nikitin lapses into Turkic and Arabo-Persian in the middle of his prayer, using "Allah" instead of "God" etc.

It may be suggested that Afanasiy Nikitin had used foreign languages in order to relate foreign realities; however, even the examples cited above demonstrate this to be untrue. Nikitin writes about foreign lands in Russian for the most part; however, whenever he recollects Russia, he begins to write in Turkic or Arabic. It suffices to recollect his prayer for Russia – Nikitin gives us a long list of the wonders that he had seen in different lands, and concludes it with fond memories of Russia (Urus) and a prayer for the Russian land. He switches to Turkic from the very start: "The land of Podolsk is abundant and rich; *a Urus erye tangry saklasyn; Allah sakla, khudo sakla, budo-* nyada munukibit er ektur; nechik Urus yeri beglyari akai tusil; Urus yer abadan bolsyn; raste kam deret. Allah, Khudo, Bog dangry" ([929], page 25). The prayer translates as follows: "May the Lord protect the Russian land; great Lord! There is no other land like it in the whole world..." ([929], page 189).

This is where the patience of the modern commentators reaches its end. They feel that the readers are entitled to an "explanation", and begin to extricate themselves in the following clumsy manner: "The prayer of Afanasiy Nikitin expresses his love for Russia, his motherland, and simultaneously – his critical disposition towards its political regime, which had led the author to using Turkic instead of Russian in his prayer" ([929], page 189).

One wonders about the relation between this "scientific explanation" and the fact that the word God is transcribed as Allah in Nikitin's text? We are of the opinion that it doesn't exist. We have seen Nikitin switch to Turkic, Persian and Arabic often and with apparent ease, in prayers as well as elsewhere. The number of such passages is so great that we have no opportunity of quoting them all presently.

In general, it has to be said that Nikitin's book irritates modern historians in a great many instances – they adhere to the odd opinion that their knowledge of mediaeval history prevails over the evidence of Afanasiy Nikitin, a contemporary and an eyewitness of the events he relates. Hence the numerous criticisms of the author.

Afanasiy Nikitin writes a lot about Buddhism and the "But cult". Modern commentary is as follows: "It is impossible that the word 'But' should stand for 'Buddha'; it is common knowledge that ... Buddhism had been completely vanquished in India between the VIII and the XI century A.D. Nikitin could neither have found any Buddhists, nor any traces of the Buddhist cult, anywhere in the XV century India" ([929], page 176).

Therefore, Nikitin had meant "something entirely different". It is presumed that his narrative should not be interpreted literally, but rather in the unnatural and convoluted manner insisted upon by the modern historians.

Another example is as follows. This is what Nikitin tells us about the natives of India: "I have asked them all I could about their faith; they told me that they believed in Adam and that Buty was Adam and all of his kin" ([929], pages 17 and 60). Therefore, Afanasiy Nikitin gives us direct indications that the Buddhist religion is related to its European counterparts, since it had also recognized Adam as the ancestor of all humankind.

The commentary of a modern historian is as follows: "The words of Afanasiy Nikitin ... appear to be based upon the misinterpreted ... words of the Hindus, who hadn't had anything resembling the cult of Adam" ([929], page 176). Once again, Nikitin is blamed for misunderstanding the natives, whereas the historians of today know everything for certain several hundred years later, correcting the XV century eyewitness as they see fit. Had they been present to help him with the interpretation of what he saw with his own eyes!

One must also note that Afanasiy Nikitin does not use the name Jerusalem in its modern meaning. Nowadays we are accustomed to use the word for referring to a single city; however, Afanasiy Nikitin is certain that "Jerusalem" translates as "the main holy city"; different religions (or nations) had Jerusalems of their own. This is what he writes: "They make a pilgrimage to their But [Buddha – Auth.] in Pervot every Great Lent; it is their Jerusalem, called Mecca by the *basurmans* and Ierusalim by the Russians [*Russ-Rim*, or "The Russian Rome" – Auth.]. In India it is called Parvat [possibly, a derivative of the Slavic word "*perviy*" – "the first", "the most important" etc – Auth.]" ([929], page 19).

Nikitin reports a very interesting thing. Apparently, Jerusalem and Mecca had not been the names of actual geographic locations, but rather words of different languages meaning the same thing, namely, the city housing the primary halidom of the religion in question, or the ecclesiastical capital of a given country. Every country would naturally have a capital of its own; these capitals would be transferred to other places over the course of time.

A propos, this must be the reason why Moscow was known as Jerusalem (or Russian Rome) at the end of the XVI century (bear in mind the frequent flexion of the sounds L and R). This is how Moscow was called in the Bible (books of Ezra and Nehemiah) – directly, and not as an allegory of any sort. We discuss this at length in CHRON6.

nepuquereps. pagate somerennore FANE CHAE . HANOPERC APENA OX 15 . AAZAHELENA. CHIER BAALIKAEE . AW MOYAOB A MITTAKIAP LOAS . H May CMOANIELMA. T. ANN . ERANO MATTER TOPHAGE KAPT . 24.4. ANN HOAH ANTIOGAZATOBENHA. WAAOTEPBOANTSIPS . MATTINIERE ERAERO ADE HA, OR ETTOMMORA. AHTMPS - X8 AOAOHOWANO REPBOANT HO. AMARAS: (MAAHA . PARMAMB. PAT שאהם אובודה אושוידסיאם יח אבאחם אוגשות. דס זינאדשאסאלם אאלינסאלי שאלם אוברדט אאאא Mint interno . WARAGREPS A TEPS . AXAASAT AND . WYICZPTAXT. A & A TTA , ENCANAMA . FIL PARMAPPARET SECONSCOVACTA . MATARA . min . yoyacamans . paramas . yoy Homory. AAZH . AANAATA . HALA AX8A . AALMEAN 168 ANNICHAOLS . ALANOMS . ANDMOYMM HOY . ANEMOY FAMILY . ANEACHES . ANEWE FAPOY . ANDMOY ITTAKAHTAENBOY . ANDXA ANICOVAAL SAPINS' AALMOCARAPH AALKA AAPS ANDKAXAPY AND BAXAAN ANDAZAKS. AALAAMATATOY AALAAMAY . AALKABILS . AAL EACENT ANBRACHIE S. ANTAPPAGIN . ANSMA BIQT. AND MYEHAN AALCEMIN AADEALAPPI. AABAICAMOY . AND A HONNIG . AABAA TS 4 2:0

Fig. 13.27. Page from the book of Afanasiy Nikitin (from the Troitskiy copy) with the final fragment of his book in Turkic. Taken from [929], inset between pages 18 and 19.

Nikitin concludes his book with a lengthy passage in Turkic and Arabic ([929], pages 31-32; see a photograph of this page in fig. 13.27). He uses several phrases from the Koran in this passage, such as "Isa ruhollo" = "Isa Rukh Allah", or "Jesus, the Spirit of Allah". This is how the Koran refers to Jesus Christ ([929], page 205). All of the above is at odds with the Scaligerian and Millerian version of the Russian history, yet concurs perfectly well with our reconstruction.

Our opponents might claim Nikitin's text to be distorted, and the Turkic passages inserted by a later editor. However, one wonders why it would be kept in the library of the Troitse-Sergiyev monastery in this case; also, there are examples of Russian and Arabic phrases mixed in ecclesiastical texts of the Orthodox Church. Let us cite the following example using materials of guaranteed authenticity as proof.

3.2. Authentic Old Russian attire dating from the XVII century and decorated with lettering in three scripts – Cyrillic, Arabic and a "mystery script" that defies interpretation today

As we mentioned above, the excavations of 1942 conducted in the Voskresenskiy monastery of Ouglich resulted in the finding of a sarcophagus that contained the remains of the monk Simeon Oulianov. The coffin dates from the XVII century. The 400year-old burial site in question is unique: the remains of the monk are in excellent condition, and his attire likewise. The finding was sent to the central city of that Region - Yaroslavl. The reasons for such excellent preservation of human remains and clothes were researched by the medics of Yaroslavl. The coffin was returned to Ouglich recently; nowadays, the monastic attire of Simeon Oulianov is exhibited in the Museum of Ouglich - the so-called Tower of Prince Dmitriy (see fig. 13.28). The actual sarcophagus and the museum plaque with the information about the burial site can be seen in figs. 13.29 and 13.30.

Figs. 13.31, 13.32, 13.33, 13.34, 13.35 and 13.36 reproduce the artwork and the lettering found upon Russian monastic attire of the XVII century; we must emphasise the issue of the finding's authenticity. This makes it radically different from most of the artefacts exhibited in the museums of the capital cities. There are several reasons why - firstly, many of the XVI-XVII century originals have been destroyed in the meticulous and relentless selection of the last 300 years conducted by the representatives of the so-called "historical science". Secondly, many of the originals have already disintegrated naturally. As for the present case, we have the unprecedented luck of studying a recently excavated original in a good condition; moreover, it had remained underground for three centuries, and was therefore fortunate enough to survive the Romanovian pogroms. It is also fortunate enough to have been treated by medics and not historians.

What do we see on the attire? It turns out that the words of the canonical prayers in Church Slavonic are mixed with words that we cannot seem to understand or interpret. The situation is similar to what we see in Nikitin's book. If we consider the three lowest lines of the inscription in fig. 13.35, we shall see that



Fig. 13.28. The monastic robes of Simeon Oulianov exhibited in the museum of "Prince Dmitriy's Chambers" in Ouglich. XVII century. Exhumed in 1942. Photograph taken in 2000.

the first one can be easily read as "krestu tvoe[mu]" ("to thy cross"). The last line isn't hard to interpret, either – it says "vkresenie" – obviously "voskresenie" ("resurrection"). All of these words are obviously Slavic, and written in Cyrillics. However, the line in between is already impossible to understand, despite the fact that it is also set in Cyrillic script, and every letter is visible. It reads as PKLAEKOTR; this might be a Slavic word or phrase in theory, but we consider this highly unlikely.

As for the lettering we see above the cross and on its sides, we already find it impossible to interpret the words as those of a Slavic language. Apart from that, the top line that one sees in fig. 13.32 obviously says "Ala ala" – "Allah, Allah" instead of "O Lord", in other words. The vertical line to the left of the cross also contains the word "Ala", apparently used in lieu of



Fig. 13.29. The sarcophagus of Simeon Oulianov exhibited in the museum of "Prince Dmitriy's Chambers" in Ouglich. Photograph taken in 2000.



Fig. 13.30. Explanatory plaque next to the sarcophagus of Simeon Oulianov exhibited in the museum of "Prince Dmitriy's Chambers" in Ouglich. Taken from a video recording of 1999.

the Slavic word for God ("*Bog*"). See figs. 13.33, 13.34 and 13.37; the phrase goes from the bottom up.

Let us turn to the lettering around the collar of the monastic attire in question. It reads as "topomilu ... pomilu" (the middle of the lettering is on the back of the attire, and therefore cannot be seen). The letters M and I comprise a single letter. The phrase obviously reads as "Gospodi pomilui, Gospodi pomilui", a standard formula of the Orthodox Church ("Lord have mercy" repeated twice). However, the word for "Lord" ("Gospodi") is replaced by the word "To". Apparently, we are confronted by yet another forgotten Orthodox word for "God" that was used in the XVII century.

Thus, whenever the modern albums and museum catalogues tell us about the artefacts of the XVI-XVII century, they appear to be completely at odds with what we learn about the objects dating from the very



Fig. 13.31. Top part of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.33. Fragment of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.32. Fragment of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.34. Fragment of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.35. Fragment of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.36. Fragment of the monastic robes of Simeon Oulianov. XVII century. Taken from a video recording of 1999.



Fig. 13.37. Fragment of the monastic robes of Simeon Oulianov. XVII century. Photograph taken in 2000.

same epoch and discovered under circumstances that curb the power of historical censorship in one way or another, amazingly enough. We are confronted with a very odd picture; however, it is easily explainable within the paradigm of the New Chronology.

A. T. Fomenko and T. N. Fomenko visited the Ouglich Citadel in August 2001 – in particular, the socalled Palace (or Tower) of Prince Dimitriy. The abovementioned XVII century sarcophagus is exhibited here, wherein the remains of the monk, his attire and his "rosary" were found. We wanted to make better photographs of the lettering upon the less accessible parts of the attire.

We have enquired with the staff of the Ouglich Citadel Museum and found out that the sarcophagus also contained a scroll and an ordination. The former was of parchment, found by the side of the monk; the latter, of paper, and found upon his chest. The ordination is rather short, unlike the lengthy scroll. The former is written in the XVII century shorthand; the latter is in a Cyrillic script. None of this is mentioned on any plaque anywhere in the museum. No known publications concerning Ouglich and its historical past mention any scrolls at all. We have naturally asked about the content of both documents. The representatives of the museum's scientific research department replied rather vaguely that these documents "probably contained the monk's biography". The scroll was old-fashioned - vertical and not horizontal (see more about it in CHRON6, Chapter 2:2.2, where we demonstrate that the old scrolls were written in such a manner that one could read the consecutive short horizontal lines from top to bottom while unrolling the scroll, from the beginning to the very end). Such scrolls were held vertically; their bottom ends would be gradually unrolled. The scroll found from the sarcophagus of the monk Oulianov had belonged to this very type.

It appears that an authentic Russian document of the XVII century has survived until the present day. We wanted to see both documents, or, at the very least, their drawn or photographic copies; however, the research department told us (in 2001) that none of the above was kept in the Ouglich Citadel anymore. The materials are said to have been handed over to the Ouglich branch of the Yaroslavl Archive; however, when we addressed the Archive in 2002, we were told that the originals had never been there. Moreover, the archive had presumably lacked so much as a copy of the materials in question. There had been a single photocopy kept in the Svyato-Voskresenskiy monastery of Ouglich, where the sarcophagus was discovered in the first place. We shall do our best to study the photocopy in question and report the results in the publications to follow; however, we have been informed that the photocopy "did not reproduce the original well".

At the same time, the archive staff reported that both documents had still been kept in the museum of the Citadel. The archive redirects all enquiries to the museum and vice versa; the situation is a complete stalemate. We never got a chance of studying these materials. Actually, the archive reports that the museum had initially "lost" the scroll, but then "fortunately recovered" it.

Actually, the staff of the Ouglich archive told us in 2002 that the back of the attire is also decorated by

an inscription of some sort, with a large picture of the Golgotha at the centre. Despite the good visibility of the letters, the text defies interpretation (likewise the "inscription in front"), and is considered to be "secret writing". There are no copies of this inscription, either. Furthermore, at the moment the sarcophagus was found, the remains of the monk were dressed in yet another ceremonial clothing article that covered the abovementioned monastic attire; however, it is said to have disappeared without a trace, and no details are known about it.

Moreover, as we discovered in 2001, the actual staff members of the Ouglich museum were not present at the study of the scrolls – they report having attended the text interpretation sessions "episodically". The main body of work was performed by the specialists from the Moscow Institute of History and Archives. Despite the fact that the text is allegedly of an Old Russian origin, it had still required "interpretation". As for the results of said interpretation, they remain unknown to the museum staff, as they confess themselves. Ouglich archive reports nescience as well. There isn't a single trace of this research left anywhere in the Ouglich museum, the city archive or the monastery; apparently, a large part of the materials in question has been taken to Moscow.

We have thus neither managed to study the documents, nor any copy thereof, nor even the results of their interpretation. The lettering found upon the attire (which is in poor correspondence with the Scaligerian and Millerian version of history) leads us to the natural thought that the scrolls may have contained "illegible parts" as well, possibly rendered in a script that cannot be read nowadays.

At any rate, it remains completely unclear just why the official exposition of the finding has never informed us about the fact that the sarcophagus had contained scrolls with the monk's biography. Why weren't the actual scrolls up for exposition, or at least their photographs, as well as their close-ins, drawn copies of the text and its translation? After all, many of the museum's visitors would be interested in seeing authentic XVII century artefacts.

We would very much like to make a general observation in this respect. Our many years of experience in communicating with museum workers have made us notice a rather odd effect. One knows where one stands for as long as one listens to their commentary meekly. Neutral questions (about the fabric of the attire and so on) usually lead to polite and informative answers. However, any question that concerns the foundations of chronology in one way or another (the century a given finding dates from, and especially documents or other evidence that the dating is based on) might change the situation radically. Questions that go beyond the standard museum discourse (such as why the Russian weapons are decorated with lettering in a script that is considered exclusively Arabic nowadays, qv in CHRON4, Chapter 13:1) are answered with the utmost reluctance as a rule, and very tersely at that. Museum workers claim nescience, lack of a personal interest, or refer to senior members of their hierarchy.

"Inquisitive" enquiries lead to tension and irritation; persistence often results in an aggressive reaction – notwithstanding the fact that the historical events in question pertain to a faraway epoch and seem unlikely to stir emotion in so profound a manner. One inadvertently gets the impression that the true archaeological history of the Middle Ages (be it that of Russia or the Western Europe) has been made classified information unofficially – the only version we have the right of knowing is the consensual history of Scaliger and Miller. Could it be that the museum workers are implicitly urged to stifle the public interest in the history and chronology of the antiquities exhibited in museums once it crosses a certain threshold?

4.

OCCASIONAL USE OF ARABIC SCRIPT IN RUSSIAN TEXTS IN THE RELATIVELY RECENT EPOCH OF THE XVII CENTURY. TRAVEL DIARIES OF PAUL OF ALEPPO

Let us cite a very representative episode from the history of the XVII century, which clearly demonstrates that Russian texts had still been written in a variety of alphabets in that epoch.

There is a very curious historical document that dates from 1656 – the travel diaries "kept by Archdeacon Paul of Aleppo, a talented ecclesiastical writer of the middle of the XVII century, who had accompanied his father, Macarios III, Patriarch of Antiochia, on every voyage. In 1656 the Patriarch made his first visit to Russia and visited Moscow ... He accepted the invitation of Czar Alexei Mikhailovich to visit the Savvino-Storozhevskiy monastery, a particular favourite of the monarch" ([422], page 94).

Paul of Aleppo had kept a regular diary – a detailed account of the Patriarch's voyage, as it were. This may have been prescribed by the rules of the Patriarchy back in the day – writing down as many details of the official visits made by the top members of the clergy as possible. The records that have survived until are day are considered to be very important evidence of historical events dating from the epoch of Alexei Mikhailovich. Large fragments of Paul's text are quoted in [422]; one can clearly see that his diaries had been voluminous and contained a large number of details.

One may well wonder about the language the diaries were written in. Any contemporary of ours raised on Scaligerian and Millerian chronology would consider it perfectly obvious that the Orthodox Paul of Aleppo, the son of the Orthodox Antiochian Patriarch, should write his report of a visit to the Orthodox Czar Alexei Mikhailovich in Russian or in Greek - another possibility is Latin; however, this should already strike one as odd. However, we learn that the diaries in question were written in Arabic, no less. Historians tell us the following: "The complete handwritten Arabic text of these diaries ... was published by the Savvino-Storozhevskiy monastery in 1898 and entitled 'The Russian Voyage of Macarios, Patriarch of Antiochia, Undertaken in the Middle of the XVII Century'" ([422], page 95).

However, the diaries shall amaze us even more. It turns out that the Orthodox author of a document that dates from the XVII century easily shifts between Arabic and Russian, and uses the Arabic alphabet for transcribing the Russian part of the text to boot. This is what we learn from a XIX century comment to the recorded conversation with Czar Alexei Mikhailovich ([422], pages 98-99) that was made in the abovementioned publication of the diaries dating from 1898: "These words, as well as the entire conversation between the scribe and the Czar that follows, are written in Russian and transcribed in the Arabic alphabet" (quoted according to [422], page 99). It turns out that Russian texts could be written in Russian yet rendered in Arabic letters as recently as in the epoch of Alexei Mikhailovich. Our reconstruction explains this fact perfectly well.

Modern historians have noted this fact, which obviously concurs with their version of history very poorly. They instantly came up with the following "explanatory hypothesis": Macarios II, Patriarch of Antiochia, is said to have been "an ethnic Arab" ([422], page 95). There is nothing to prove this version written anywhere in [422]; however, even if this is true, the oddness remains. The diaries in question were written by a member of the Patriarch's entourage as an official document; their language must have been the official language of the Orthodox Patriarchy (either Russian or Greek). The ethnic origins of the author had hardly interested anyone - he should have written in the language of the Orthodox Patriarchy and not that of his parents. The Patriarchy would obviously fire the scribe otherwise. The very fact that the diaries written by Paul of Aleppo in Arabic and Russian (transcribed in Arabic characters) has reached our epoch means that it has been stored with care, as an important official document - possibly, by the Antiochian Patriarchy.

However, nowadays we are being told that the documents of this kind written in Arabic must necessarily be of an Islamic origin. However, the Antiochian Patriarchy had been one of the most important centres of the Orthodox Church. Apparently, the real events of the XVII century must have differed from their modern rendition drastically.

5.

ARABIC NUMERALS AS DERIVED FROM THE ALPHANUMERIC SYMBOLS OF THE SLAVS AND THE GREEKS IN THE XV-XVI CENTURY A.D.

5.1. The invention of positional notation: when did it happen?

Nowadays it is commonly presumed that the positional notation system was invented in India "in times immemorial" ([821], page 88), and then adopted by the Arabs. The latter had brought it to mediaeval Europe. This is where the "Arabic numerals" acted as a catalyst for the rapid development of mathematics and calculus in the second part of the XVI and the

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beginning of the XVII century. In particular, the year 1585 marks the invention of decimal fractions ([821], page 119). According to D. J. Struik, the famous specialist in the history of mathematics, "it had been a major improvement that became possible due to the mass adoption of the Indo-Arabic notation. Another major improvement had been the invention of the logarithms" ([821], page 120). The invention of the logarithms took place in the first half of the XVII century ([821], pages 120-121).

We must emphasise that the decimal fractions and the logarithms couldn't have been invented before the introduction of the positional decimal notation system. Moreover, these inventions must have been relatively easy to make after the introduction of the positional system. Indeed, let us consider the invention of the decimal fractions. If the notation system that we use is positional, moving a digit one place upwards makes the value of said digit ten times greater. The unit digits occupy the lowest place in this system; the idea of continuing the notation further downwards, below the unit digits, is therefore a natural one. One adheres to the same rule - moving a digit one place downwards should make its numeric value ten times smaller. The only thing this invention requires is a separator of integers and fractions, or the decimal point. For instance, the figure 16.236 employs the point to separate two places of integers from three places of fractions. This invention hardly required hundreds of years, as the Scaligerian history of science is trying to convince us, and is likely to have been made a few decades after the invention of zero and the positional notation system.

The invention of decimal logarithms must have been slightly more difficult, yet could not have been a major problem, since it stems from the decimal positional notation as well. The matter is that the integer part of a decimal algorithm represents the length of a given number as transcribed in the decimal position notation minus one. The following simple circumstance is easy enough to notice, and must have been noticed without much delay, namely, that the multiplication of two numbers results in the summation of their lengths in general; occasionally, it requires the subtraction of one. This results from the fact that the logarithms of two multiplied numbers add up. Therefore, the integer parts of logarithms are added up as well; the subtraction of one is needed in cases when the fraction parts of the logarithms of multiplied numbers equal one after addition. Apparently, mediaeval mathematicians would need to make a more precise estimation of the characteristic stemming from a given number's length, so that these characteristics would add up after the multiplication of the numbers in question. The correct understanding of this idea instantly leads one to the concept of logarithms. This is the very problem that John Napier was trying to solve when he invented logarithms in the beginning of the XVII century. His conception had initially been somewhat clumsy, but it didn't take much time to evolve to more or less the same condition as nowadays ([821], page 121). D. J. Struik reports that the first table of decimal logarithms of integers (from one to one hundred thousand) was first published in 1627 ([821], page 121) a mere 13 years after the very first publication on this topic made by John Napier ([821], pages 120-121).

Thus, the concept of positional decimal notation cannot predate the introduction of decimal fractions and logarithms by too great an interval of time. Since the logarithms were invented in the beginning of the XVII century, one can make the rather certain presumption that the propagation of the positional decimal notation cannot possibly predate the middle of the XVI century A.D. It had initially been a concept used by specialists, such as mathematicians and experts in calculus, and then became popular with editors, artists, schoolteachers etc.

Nevertheless, we are being told that the Western European artists, as well as representatives of other professions that have got little or nothing at all to do with mathematics, had freely used the positional decimal notation in the XV century and even earlier, let alone the Indians, who had allegedly used this system as early as in 500 B.C. ([755], page 20). However, the very same Scaligerian history of science tells us that the "ancient" Indians had later "forgotten" their formidable achievements in the field of mathematics. Yet they somehow managed to relate it to the Arabs before this strange affliction of forgetfulness, who had, it turn, carried this torch of "ancient knowledge" for centuries before illuminating the ignorant Europe at some point in the Middle Ages, when India had already entered the dark age of mediaeval ignorance, likewise Europe (insofar as mathematics are concerned, at least). At any rate, we are told that "we have a very limited amount of data concerning the development of mathematics in China and India; many pieces of material evidence have disappeared, or simply haven't been discovered to date" ([755], page 45).

We believe this picture to be perfectly unnatural and unveracious. We can easily estimate the approximate date when the positional decimal notation system was discovered from the rapid development and propagation of this concept; it started in the end of the XVI century ([821]). Therefore, the naissance of the concept in question must date to the middle of the XVI century and not any earlier. It makes no sense at all to separate the naissance of a concept from its direct and obvious consequences by hundreds and even thousands of years, the way it is done in Scaligerian history. Therefore, all of the "ancient" Babylonian, Indian, Arabic and other texts that employ positional decimal notation in one way or another cannot possibly predate the XVI century. This observation fully pertains to the famous cuneiform tablets of Mesopotamia. We are told that the "ancient Sumerians" had widely used the positional notation as early as in the third millennium B.C. ([821], page 40). They are also presumed to have easily solved linear and quadric equations with two variables two thousand years before Christ. D. J. Struik reports the following: "Babylonians of Hammurapi's epoch had fully mastered the technique of solving quadric equations. They could solve linear and quadric equations with two variables and even problems with cubic and biquadratic equations" ([821], page 42). In the first millennium before Christ, "ancient Sumerians" could already make calculations "rendered to the seventeenth hexadecimal unit. Calculations of such complexity were neither required by taxation problems, nor by measurements they had stemmed from the necessity of solving astronomical problems" ([821], page 44).

We are of the opinion that all of these achievements of the "ancient" Sumerian mathematics were made in the XVI-XVII, or even the XVIII century A.D. and not before Christ. It is significant that even John Napier, the inventor of logarithms, "had tried to evade operations with fractions" ([755], page 130). Specialists in history of mathematics usually say that he had performed such operations "with ease"; nevertheless, the mere fact that he had tried to evade fractions speaks volumes - and shouldn't be perceived as odd, since, as we have seen, decimal fractions were invented in 1585, when John Napier (1550-1617) had been 35 years of age ([821], page 121). Prior to that, operations with factions (non-decimal) had been cumbersome and rather complex. Mathematicians, accountants, book-keepers and astronomers who had lived in Mesopotamia in the XVI-XVIII century apparently suffered from paper shortage, hence the use of clay tablets for calculations. Clay tablets became obsolete in the XVIII-XIX century, when paper became an easily accessible commodity. These tablets were discovered some 100 years later by the archaeologists from Western Europe, and instantly proclaimed to be "ancient evidence testifying to the great power of Sumerian science", which had allegedly flourished in the III millennium B.C. The locals didn't object.

5.2. The origins of the Arabic numerals used for positional notation

D. J. Struik reports: "The symbols used for transcribing digits in positional notation had been rather varied; however, one can distinguish between two primary types – Indian symbols used by the Eastern Arabs, and the so-called *gobar* (or *gubar*) digits used by the Western Arabs in Spain. Symbols of the first type are still used in the Arabic world; as for the modern system, it appears to have derived from *gobar*" ([821], page 89).

The issue of the "Arabic notation's" origins still remains a mystery for the Scaligerian history of science. There are several theories about it – Vepke's, for instance, which suggests these symbols to have come to the West in the alleged V century A.D. from Alexandria by proxy of the neo-Pythagoreans ([821], page 90). Another theory was put forth by N. M. Boubnov; it claims the *gobar* symbols to be of a Graeco-Roman origin ([821], page 90). However, neither system refers to the predecessors of the familiar Arabic numerals. The latter are said to be derived from the ancient (as in "forgotten") Graeco-Roman symbols, or, alternatively, "Alexandrian" – also forgotten and therefore unknown.

V. V. Bobynin, the famous Russian researcher of the history of mathematics wrote: "History of our digit

	a — 1	к —	20	X	- 600		16						
	в л — 30			q	- 900 (used since	*	ж					
					the er	nd of XIV c	y) нж						
	в — 2	м —	40	. ч	- 90		A	- 900 (used	until				
	r - 3	и —	50	, m				the XV cen	itury)				
	A - 4	o —	70	- u			1/A						
	e — 5	a —	80	ъ			š-	- 60					
	$s = 6 \qquad p = 100$ $x \qquad c = 200$			N			¥-	$\psi = 700$ $\omega = 800$ (used until					
							ω -						
	3 - 7	т —	300	·k	÷1.			the end of	f XIII cy)				
	н — 8	5 Y (8 =	= oy) -	400 ю			- in -	000 1					
	1 -10) 4	500	14			w -	w - SOU (Used Since the XIV century)					
								Q	century)				
							da -						
1	2	3	4	5	6	7	8	9					
	~ ~ ·	T.			ĩ.		ũ.	Ā.					
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	. ¥ .						·	.5.					
			• M •	• • • •	.3.	•0•	• 11 •	1.5.1	ACCATEN				
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.n.				· .	· v .		m						
• p •	•0•	- 111 -	- y -	· .		• • •		. 4.	сотници				
									(hundreds)				
-		. T.			.2.				#110 mm				
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									(ulbusallus)				
· @.	· @.	· (T).	· (T).	.0.	.0.	. 2.		.A.	TAN				
(a).	·@·	.0.	-(A)-	.6.		.0.	. (n).	.0.	(tens of thousands)				
.(2).	·(P).	·(T).	·(T).	. E.	.(2).	.(2).	·(W).	. (легнины				
in the	(E)	- Er	(e)	10,	6	19	(de)	(E) (hu	ndreds of thousands)				
						6.6							
X= .	. B	· T	•-π÷•			3	·-W	0					
11-	115	-	7.5	11	-15	-15	105	11	AEWAOPH				
									(minons)				

Fig. 13.38. Ancient Slavic and Greek semi-positional notation. Taken from [728], Issue 1, page 16.

symbols is but a number of assumptions interspersed by arbitrary conjectures that have taken on the axiomatic appearance owing to the prior use of suggestion methods" (quoting by [989], page 52).

We adhere to the hypothesis that offers an easier explanation. Once we ponder this properly and let go of the scholastic Scaligerian datings, the origins of the "Arabic numerals" become rather obvious. We identify the immediate predecessor of the positional system as the Graeco-Slavic semi-positional notation system below; it is also made obvious that the version used had been Slavic and based on the Russian shorthand script of the XVI century. All of the above is likely to have happened in the XVI century, the epoch when the positional system was discovered, qv above. Let us delve deeper into the details now.

The notation used in Russia before the invention of the positional system had been semi-positional, with three diacritic signs existing for each decimal symbol ([782], issue 1, page 16). One such sign stood for unit digits, another – for tens digits, and the third was used for hundred's units, qv in fig. 13.38. Zeroes were altogether absent; however, since the unit symbols had differed from place to place, the place indication would be contained in the actual symbol. This would allow one to perform all the usual arithmetic operations with integers smaller than a thousand. Integers greater than a thousand required the use of special symbols (see fig. 13.38). Cyrillic characters had served this purpose.

Let us make a few comments about the table in fig. 13.38. For instance, the figure of one could be represented in three different ways:

1) The letter A if the figure in question stood for the unit digit.

2) The letter I if the figure stood for the tens digit.

3) The letter P if the figure stood for the hundreds digit.

For instance, 101 would be transcribed as PA. Modern positional system utilizes zero for this number, but there were no zeroes in the ancient Slavic semi-positional notation system; however, the very letters used demonstrate that one of them represents a units digit, and the other stands in the hundreds place.

Thus, the transcription of integers between 1 and 1000 had required three times as many symbols as we use today (nine of them altogether, not counting the zero) – 27 Cyrillic characters, that is, with three characters playing the part of a single digit. The table in fig. 13.38 arranges those 27 characters into three lines; we see three different Cyrillic characters underneath every Arabic numeral. The other four lines repeat the first; the characters are accompanied by special symbols that represent the remaining places (between the thousands and the millions). We see no new letters used here.

How did the abovementioned system become replaced by its positional successor, complete with zeroes et al? This would require the selection of nine symbols out of 27 -one of them standing for "1", another for "2" and so on.

This is precisely what had happened. As we shall see below, this has resulted in the creation of the "Arabic numerals" used to date, which makes it obvious

Arabic numerals as derived from the Slavic and	Greek
alphanumeric characters after the invention of th	ie zero

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	2 20 200	BKC	н с	BKC		The Slavic in lieu O	e sec alph of th f the	ond le labet ne sec Gree	etter o was t cond k alph	of the taken letter habet	
Shorthand form	3 30 300	Г Л Т	Γ π	7		-		7:		7	+
	4 40 400	А М У	А 4	9 8		T		4 4=		4	
Shorthand form	5 50 500	енф	£ ++	6 8	E ,	Mirro eflecti	r on	6 =		6	+
Shorthand form	6 60 600	SmX	S	S		J		5 =		5	•
	7 70 700	304	3+	3		Ĩľ	. ≪	3 =		3	•
	8 80 800	HE3	x F G	>		Turned by 90°	8	3=		8	
	9 90 900	4 Y J 4	· · ·	47		1	> ;	9=		9	

Fig. 13.39. Our table that reflects the derivation of the Arabic numerals from the Slavic alphanumeric characters of the semi-positional notation system used previously. Pay attention to the fact that in many cases the Arabic numerals were derived from the shorthand forms of Cyrillic letters.

that their inventors had been using the Graeco-Slavic semi-positional notation previously. Also, most of the "Arabic numerals" are based upon the Russian shorthand versions of Cyrillic letters as used in the XVI century. This can only mean one thing – the inventors of the "Arabic numerals" had known Russian well, and the Russian shorthand writing of the XVI century had been a familiar script for them.

This eliminates the "great mystery" of Scaligerian history, making the origins of the "Arabic numerals" evident. We believe them to be derived from the shorthand versions of the Graeco-Slavic "letter numerals"



Fig. 13.40. Shorthand form of the Slavic letter \Re at the end of the word "znamya" ("banner"). It is perfectly obvious that if we are to discard the top stroke, we shall end up with the "Indo-Arabic" figure of nine. Taken from [791], issue 19.



Fig. 13.41. Shorthand form of the Slavic letter T at the beginning of a word. It is obviously identifiable as the "Indo-Arabic" figure of 7. Taken from [791], issue 19.



Fig. 13.42. Shorthand form of the Slavic letter E at the end of the word "velikiye" ("the great ones"). The "Indo-Arabic" figure of six is a mirror reflection of this letter. Taken from [787], issue 7.

as used by the Russians in the XVI century. Moreover, other details that we shall relate below demonstrate that the "Arabic numerals" had been the Russian shorthand script and not the Greek – the two alphabets are somewhat different.

Let us consider the table in fig. 13.39, discussing each figure separately.

1) *The figure of one*. The symbol chosen to represent the figure of one is the letter I that had formerly stood for the tens digit, as the simplest of the three. It is highlighted in fig. 13.39; the final version had been the Indo-Arabic figure of 1.

2) *The figure of two.* This figure was derived from B – the second letter of the Slavic alphabet. It does not exist in the Greek alphabet, where we have A followed by B.

We shall consider the figure of three below, since the symbol that represents it had been swapped with the figure of seven.

4) The figure of four. This figure is used in two versions – closed and open. The former derives from the Slavic letter \square , which we find used as a unit digit, and the latter – from the Slavic letter V, which had represented 4 in the hundreds place, qv in fig. 13.39. The letter in question is the obvious precursor of the "Indo-Arabic" figure of four.

We shall omit the figures of five, six and seven for the time being, since their positions had been rearranged.

8) *The figure of eight*. It is derived from the Slavic Omega that had stood for the figure of eight in the hundreds place. The letter is rotated by a factor of 90 degrees, qv in fig. 13.39; this is how the "Indo-Arabic" figure of eight came into being.

9) The figure of nine. The "Indo-Arabic" digit in question identifies as the non-standard form of nine in the hundreds place that had been used in Russia exclusively. The Graeco-Slavic notation had used the letter LI for this purpose; however, the Russians had also employed the letter Я. The shorthand version of the letter is de facto the figure of nine with an extra stroke, which has transformed into the "Indo-Arabic" numeral that we use nowadays (see fig. 13.39). This shorthand version was canonised during Peter's reform, and has been used ever since, with slight modifications. In fig. 13.40 we reproduce a specimen of Russian shorthand writing that dates from the early XVII century ([791], issue 19, flyleaf). What we see is the Russian word for banner, znamya; its final letter is Я.

Let us now consider the "Indo-Arabic" figures of three, five, six and seven.

3 and 7) *Three and seven.* The "Indo-Arabic" figure of 3 derives from the shorthand version of the Russian letter 3, which had been used to represent seven as a units digit (see fig. 13.39). We see the letter and the numeral to be completely identical! As for the "Indo-Arabic" figure of 7, it owes its existence to the Russian letter T in shorthand, which had represented three in the hundreds place (see fig. 13.41). Thus, the symbols used for 3 and 7 had been swapped for one another for some reason.

5 and 6) *Five and six*. The "Indo-Arabic" figure of 5 originates from the shorthand version of the Russian letter *zelo*, formerly used to represent six as a units digit (see fig. 13.39). Inversely, the "Indo-Arabic" figure of six derives from the Slavic letter E in shorthand script, which had once stood for the figure of five as a units digit (actually, the shorthand version is very close to the handwritten letter E in modern Russian). The inventors of the "Indo-Arabic" script had simply used the mirror reflection of the Slavic letter E for the figure of six. In fig. 13.42 one sees another specimen of Russian shorthand writing dating from the early XVII century, wherein the letter E at the end of the word *velikiye* ("the great ones") is transcribed as the mirrored figure of 6 ([787], issue 7). The figures of five and six have also been swapped in a rather odd manner, likewise the figures of three and seven.

0) Zero. The numeral used for zero is of a particular interest to us, since the introduction of the new notation system only became possible after the invention of the zero, which stands for a missing digit, or an empty place. Zero is used as a placeholder of sorts; the symbol used for it is most likely to be an abbreviation of some word. Which one exactly? If we presume the word in question to have been Slavic, the explanation is rather simple. According to V. Dahl, the preposition o is the archaic form of the modern Russian preposition ot ([223], Volume 2, column 1467). This preposition is commonly used for referring to an absence of some sort; the etymological dictionary tells us that ot is "a verbal prefix used for conveying the concepts of cessation, distance or removal" ([955], Volume 1, page 610). It would therefore make sense to indicate the absence of a digit with a symbol that resembles the letter O. Apparently, this is where the zero comes from.

It is also possible that nol, the Russian word for "zero", is a derivative from the Old Russian words noli and nolno. The word is obsolete nowadays, but had been used commonly up until the XVII century as a restrictive adverb that translates as "not earlier than", in particular ([789], page 421). Zeroes in positional notation can also be regarded as restrictive symbols, precluding the neighbouring digits from occupying the place of the missing one. The old semipositional notation would merely lump all digits together and omit the empty places – hence the necessity to use three symbols for the transcription of a single digit in order to distinguish between units, tens and hundreds. This does not happen in positional system due to the use of zeroes, which are used to keep the digits in their proper places, as it were. It is therefore possible that the zero had initially been regarded as a restrictive symbol, its Russian name ("*nol*") being a logical derivative of the restrictive adverb *nolno* used in Old Russian. The two sound very much alike.

Apart from that, the Old Russian word noli had been used for referring to an unrealisable conception, or a possibility that never came to pass, as one can clearly see from the following sentence in Old Russian, for example: "pomyshlyal yesm v sebe: noli budu luchii togda, no khud yesm i bolen" ([789], page 420). The sentence translates as "I had thought that I might get better, but I am thin and ailing". The Old Russian word "noli" used in this meaning also strikes the authors as a possible ancestor of the new symbol's name, "nol". The zero can also be interpreted as a symbol of an "unrealised possibility", which we may perceive as the missed opportunity of having used a digit with an explicit numeric value in lieu of the zero. The zero is telling us that the place it occupies is void of the numeric value it may have possessed in theory.

One may naturally attempt to trace the origins of the zero symbol (0) to the Latin word "*ov*", which can translate as "in exchange for" ([237], page 684). Yet one may wonder whether this "ancient" Latin word might be derived from the Slavic prefix *ob*, which constitutes a part of the Russian word for "exchange", *obmen*. Many of the "ancient" Latin words had been imported from Slavonic originally, as we demonstrate in our Parallelism Glossary (see CHRON7).

And so, the name of the new digit ("*nol*", cf. the English words "null" and "nil", the German word "Null" etc), is most likely to be of a Slavonic origin. Similarly, the new "Indo-Arabic" numerals are but slightly modified versions of the Old Russian letters that had formerly been used as numerals. Positional notation is thus a relatively recent invention that is unlikely to predate the end of the XVI century – a far cry from the distant Middle Ages, or the presumed epoch of the positional system's invention in the fallacious Scaligerian chronology.

Let us conclude with the following observation. It is theoretically possible to search for letters that would resemble the "Indo-Arabic" numerals in other alphabets. However, it must be emphasised that randomly chosen alphabets are most likely to be unfit for this purpose. The discovery of "letters that resemble numerals" in a given alphabet is possible per se. The objective is to discover alphabetic symbols that had actually been used as numerals in the Middle Ages. Apart from that, owing to the conservative nature of indications as a whole, the symbols used in the new notation system must correspond to the respective values of the old "alphabetic numerals". We find this to be the case with the Graeco-Slavic alphabet and the "Indo-Arabic" numerals. It makes no sense to consider arbitrary symbols from other alphabets that had never been used as numerals.

The conclusion that we have made, namely, that the invention of the zero dates from the end of the XVI century the earliest, is in perfect concurrence with the following historical fact, which is very widely known and perfectly baffling from the Scaligerian viewpoint. It is suggested that the zero was invented in "deep antiquity". However, it has been noted that even as recently as in the XVI century, no mathematician would consider zero as a viable equation root ([219], page 153). Moreover, specialists in the history of science report that the natural idea of making the right part of a given equation equal to zero dates from the late XVI - early XVII century and not any earlier ([219], page 153). And yet we are being told that the concept of zero had been introduced some several centuries prior to that: "Equation roots equalling zero had been an alien concept for the mathematical science of the Renaissance. The canonical form of equations was invented by the Englishman Thomas Harriot (1580-1621) in his book entitled The Application of Analytical Art ([219], page 153). This can only mean one thing, namely, that the numeral that represents zero had not existed before the end of the XVI century. One can hardly think of another explanation.

5.3. Conspicuous traces of sixes fashioned into fives found in the old documents

Let us, for instance, consider the well-known engraving of the famous mediaeval artist Albrecht Dürer (who is presumed to have lived in 1471-1528) that is entitled "Melancholy" (see fig. 13.43; taken from [1232], number 23). In the top right corner of the engraving we see a so-called magic square, four rows by four columns. The sum of the numbers found in each row equals the sum of the numbers contained in every



Fig. 13.43. Albrecht Dürer's engraving entitled "Melancholy". Taken from [1232], issue 23.





Fig. 13.44. Fragment of "Melancholy", the engraving of Albrecht Dürer, depicting the "magical square". Taken from [1232].

Fig. 13.45. An obvious alteration of a figure in the "magical square". The figure of 6 was transformed into 5. Taken from [1232].

column, namely, 34. In fig. 13.44 we reproduce a close-in of this square, and in fig. 13.45 one sees a close-in of the first cell in the second row, which contains the figure of five. This is the very figure that is required for making the square in question a "magic square". However, a close study of the reproduction makes it perfectly obvious to us that this very figure

of five is a corrected figure of six (see fig. 13.45). This is very easy to explain – the modern figure of six had initially been ascribed the numeric value of five, and vice versa – the modern fives had stood for sixes in the XVI century. Dürer's "magic square" had initially used these "old indications". However, the alteration of said indications had resulted in the loss of the square's "magical" properties. The engraving needed to be corrected – this may have been done by Dürer himself, or indeed by one of his apprentices or followers. This particular engraving bears a distinct mark of this digit correction campaign of the XVI-XVII century; however, similar traces are very likely to be found in other works of art and documents.

5.4. XVII century alterations introduced into the old datings

The fact that the values of the "Indo-Arabic" numerals had still been in a state of flux in the early XVII century must have been used by the Scaligerites for the falsification of the datings pertaining to that epoch. Let us assume that a certain document contains a dating that corresponds to the beginning of the XVII century - 1614, for instance, transcribed in the old manner (as 1514, that is - the second symbol was derived from the letter "zelo", and had originally stood for six). The numeric value of this symbol eventually changed, and became equal to five. If we are to forget about the original value of the digit in question, the date 1514 shall transform into fifteen hundred and fourteen, having stood for sixteen hundred and fourteen originally. What we have is a hundred years of extra age. This simple method allowed for the backdating of a great many XVII century documents. Apparently, the Scaligerian historians of the XVII-XVIII century had used this method extensively. Many of the XVI-XVII century events became shifted a century backwards as a result. Indeed, we are already well familiar with the centenarian chronological shift inherent in the history of Europe, and Russian history in particular.

It is possible that the altered values of the "Indo-Arabic" alphabetic numerals had served a particular end – concealing the Graeco-Slavic origins of the "Indo-Arabic" numerals. This must have taken place in the epoch of the Great = "Mongolian" Empire's decline and fragmentation, or the first half of the XVII century, when the "new history" of ancient and recent times alike was being introduced. We discuss this issue in CHRON6, pointing out that the creation of new languages, new grammar rules etc had been high on the agenda of the Western European state independence programme. The deliberate distortion of the notation system that had been used previously must have been one of the crucial reformist endeavours. All of the above must have served the objective of severing the ties with the former Great = "Mongolian" Empire and its traditions, language-wise and digit-wise in particular. Therefore, 5 had swapped places with 6, and 3 – with 7. The connexion between the Slavic numerals and their freshly introduced Western European counterparts became less obvious as a result; it requires some effort to be discovered nowadays. Without these manipulations, the connexion would have been instantly noticeable. It suffices to recollect the figure of 3, which is still completely identical to the Slavic letter 3.

It has to be stated explicitly that the fact that we discovered above does not imply that the "Indo-Arabic" numerals were invented in Russia. It is possible that their inventors had hailed from Egypt or the Western Europe originally, seeing as how the Great Empire had still been united in the late XVI - early XVII century. Different imperial provinces had played different parts in a rational and convenient way. The Czars, or Khans of the Horde had been developing the shipbuilding industry in some of the regions, while the others specialised in science, fine arts, medicine and so on. All the achievements and discoveries would instantly be put to use throughout the entire "Mongolian" Empire, while the Imperial court of the Empire (and the Great Czar, Khan or Emperor in particular) became the proprietor of the fruits of labour (physical, intellectual and so on). However, the fragmentation of the empire had brought a strange phenomenon about - namely, the notions of severe inter-regional competition (claims of medical or scientific supremacy of one region over another, and the like). None of it could have existed before the fall of the empire - one region taking pride in the manufacture of cannons, another - in shipbuilding etc. The fact that both ships and cannons had recently been communal property of the Empire, built

and cast in accordance with the general imperial plans of development drawn up in the Emperor's chancellery.

Therefore, let us reiterate that the "Indo-Arabic" numerals may have been invented in whatever region of the Empire had been distinguished by a high concentration of scientific centres that had received additional financing from the imperial treasury. However, we insist that this invention had been the logical next step after the Old Slavic tradition of transcribing numerals as letters, and that this tradition had been the only one that could have led to the invention



Fig. 13.46. Albrecht Dürer's self-portrait dating from the alleged year 1493. The real dating is most likely to be 1593, a hundred years more recent. Taken from [1232], illustration 1.



Fig. 13.47. Close-in of the fragment of Dürer's self-portrait with the date.



Fig. 13.48. Albrecht Dürer's engraving entitled "Battle of the Sea Gods". The dating at the top is identified as the alleged year 1494 – the real dating is more likely to be 1595 A.D. Taken from [1232], #4.



Fig. 13.49. Close-in of a fragment of Dürer's engraving with the date. Taken from [1232], #4.

of the "Indo-Arabic" numerals. If the place of their invention is identified as Europe, it shall only mean that the Europeans had used Slavic letters at some point in the past. If the positional notation is a Russian invention, the West Europeans may have imported the Slavic numerals, possibly also rearranging them somewhat on the way, swapping the respective positions of fives and sixes, as well as threes and sevens.

The readers might enquire about the absence of the first "Indo-Arabic" numerals from the Old Russian documents; we can explain it in the following manner. Apparently, the "Indo-Arabic" numerals entered wide circulation all across the Western Europe (and became *de rigueur* for official documents et al) in the XVII century; Russia started to use them en masse in the epoch of Peter the Great, shortly afterwards. One must distinguish between the stage of the "Indo-Arabic" numerals' invention in the late XVI – early XVII century, and the period of their propagation, which falls on the XVII century and postdates the fall of the Empire, when the Russian society had already been made culturally dependent from Western Europe by the new dynasty of the Romanovs. Thus, the new Romanovian Russia hastened to adopt the very same numerals as the ones that had started to propagate across the Western Europe a short while earlier.

If the positional notation system was invented in the beginning of the XVII century the earliest, and its widespread use began a few decades later, around the middle of the same century, we cannot encounter this notation in any document that predates the end of the XVI century. Whenever we hear stories of ancient documents with "Indo-Arabic" datings such as 1250, 1460 or even 1520, presumably inscribed upon them back in those halcyon days, we should know them to be forgeries - those may come in the shape of entire documents dating from a much more recent epoch, or as false "Indo-Arabic" datings inscribed on authentic old documents by the hoaxers. As for the alleged XVI century datings, some of them might actually pertain to the XVII century, as we explained above. Modern historians misinterpret the old figure that had once stood for six, claiming it to correspond with the modern figure of five, since the two symbols look identical.

This brings us back to the issue of just when the public figures of the XV-XVI century known to us today could have really lived. For instance, we are told that Albrecht Dürer, the famous artist, had lived in 1471-1528. We might do well to doubt this; he must have lived in the late XVI – early XVII century. Since the ancient dates beginning with 15 really pertain to the XVII century, and we see plenty of them upon his drawings and paintings, the early XVII century is the actual epoch when his famous engravings and star charts for Ptolemy's Almagest were created, as well as the rest of Dürer's oeuvres.

Bear in mind that our analysis of the Almagest demonstrates this book in its modern form to date from the early XVII century the earliest, qv in CHRON3. Likewise, Dürer's star charts for the Almagest were manufactured around the same time, and not a century earlier.

Let us now cite several examples of how a num-

ber of prominent mediaeval artists transcribe dates on their paintings and drawings. The above makes it clear that these works of art were made about a century later than consensual chronology claims.

In fig. 13.46 we can see a self-portrait of Albrecht Dürer ([1232], painting #1). We can see the date above the artist's head clearly enough (fig. 13.47). Nowadays this date is interpreted as 1493; however, let us pay closer attention to the shape of the second digit from the left, allegedly the figure of four. Could this symbol really be a slight modification of the Slavic letter E, which had formerly stood for 5? If this is indeed the case, the date on Dürer's self-portrait must be read as 1593 – the very end of the XVI century and not the XV, as it is widely believed nowadays.

In fig. 13.48 we see one of Dürer's engravings ([1232], #4). Once again, we see a dating in the top of the picture (see fig. 13.49). This dating is read as 1494 nowadays; however, a more attentive study of the so-called "figure of four" reveals the latter to resemble the handwritten Slavic letter E; should this prove true, the date upon the drawing must be read as 1595 and not 1494.

Another painting by Albrecht Dürer is reproduced in fig. 13.50 ([1232], #11). It also has a date upon it (see fig. 13.51). The date is traditionally interpreted as 1499 – however, once again we see a derivative of the Slavic letter E and not a figure of four; this letter stands for the figure of five in its archaic transcription. The real dating of the painting is therefore 1599 and not 1499.

In fig. 13.52 we see another engraving of Dürer's ([1232], #12). It has got a dating at the bottom (fig. 13.53). The consensual interpretation of the dating is 1502 – however, the second digit stands for 6 and not 5, as we have already explained. It also becomes perfectly clear to us that Dürer's brilliant drawing technique is really an achievement of the XVII century.

Yet another painting by Albrecht Dürer is reproduced in fig. 13.54 ([1232], #16). We see a date above the young woman's head (fig. 13.55). Once again, we must insist that the date must be read as 1606 and not 1505, since we know that the symbol used for the figure of five nowadays had previously stood for six. Apart from that, the first digit is drawn as X and not I (fig. 13.55). This letter is the initial of the name "Христос", or "Christ", which confirms our theory that the first digits of the ancient datings had originally represented the letter I (the first letter of the name Jesus – also written as Iesu, or *Iisus* in Russian). The letter had subsequently been declared a digit, or a figure of one in the thousands place. As a matter of fact, in the present painting we see the letter X drawn in a special manner that is characteristic for the Cyrillic script.

One needn't think that Albrecht Dürer is the only artist affected by the phenomenon described above



Fig. 13.50. Albrecht Dürer's painting allegedly dating from 1499. The real dating is most likely to be a hundred years more recent – 1599. Taken from [1232], #11.



Fig. 13.51. Fragment with the date from Dürer's painting allegedly dating from 1499.

- it has affected every other painter and sculptor whose oeuvres are dated to the XV-XVI century nowadays, as well as the datings found in the "old" books (bibles in particular).

In fig. 13.56 we see "The Decapitation of John the Baptist" by Hans Fries, a painting kept in the Basel Museum of Art ([104],#10). In the bottom of the picture we see a dating interpreted as 1514 nowadays (see fig. 13.57). Bearing the old numeric value of the symbol 5 in mind, we should interpret the date as 1614 or 1615. One must also mark the first symbol



Fig. 13.52. Albrecht Dürer's drawing allegedly dating from 1502. The real dating is most likely to be 1602. Taken from [1232], #12.



Fig. 13.53. Fragment with the date from Dürer's drawing allegedly dating from 1502.

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on the left – clearly the letter I, complete with a dot on top. We see another dot in front of the date. Thus, we see the "first digit" as I, or the first letter of the name Jesus (Iesu/*Iisus*), which concurs with our reconstruction perfectly well.

The shape flux of the "Indo-Arabic" numerals in the epoch of the late XVI – early XVII century is manifest vividly in the oeuvres of Lucas Cranach, the famous artist of the Middle Ages. He is presumed to have been born in 1472 and died in 1553 ([797], page 643). For instance, the figure of 5 (which must have



Fig. 13.54. Albrecht Dürer's painting allegedly dating from 1505. The real dating is most likely to be a hundred years more recent – 1606. Apart from that, the first figure of one is obviously transcribed as the Cyrillic X, or the first letter of the name Christ in Russian. Taken from [1232], #16.



Fig. 13.55. Fragment with the date from Albrecht Dürer's painting allegedly dating from 1505.

stood for 6) is drawn differently from painting to painting. Since Lucas Cranach is more likely to have lived in the XVI-XVII century and not the XV-XVI, such variations in date transcription indicate that the rules of transcribing the "Indo-Arabic" numerals had still been in formation in the XVII century.

Cranach's engraving entitled "David and Abigail" is reproduced in fig. 13.58 ([1310], page 7). In the bottom right corner we see the drawing of a plaque with Lucas Cranach's initials, a dragon and a date (see fig. 13.59). The consensual interpretation of the date



Fig. 13.56. The painting of Ian Fries entitled "The Beheading of John the Baptist". Basel Museum of Art. It is dated to the alleged year 1514; however, the real dating must be a hundred years more recent – 1614 or 1615. Mark the fact that the first "numeral" is transcribe as the letter "i" with a dot, or the first letter of the name Jesus (Iisus). Taken from [104], #10.



Fig. 13.57. Fragment with the date on the painting of Hans Fries entitled "The Beheading of John the Baptist".