
Interview

An Interview with Javid Jafarov: Ancient Manuscripts and Their Historical Importance

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Abstract

Dr. Javid Jafarov is currently Associate Professor with a Ph.D. in History. He is currently head of his department at the Institute of Manuscripts (named after Mahammad Fuzuli of the Azerbaijan National Academy of Sciences). In this interview, he discusses his work in terms of the conservation, restoration and digitization of ancient works.

Professor Jafarov, how did you first become interested in ancient manuscripts and books?

I started growing interest in old books as a child. There was an old edition of Homer's Iliad, published in Russian at my grandparent's home. They were proud of the antiquity of this publication and would read it to me.

My childhood was in the 80s. At that time, my country, Azerbaijan, was still a part of the USSR. We first gained our independence in 1918, however the Russian Empire occupied Azerbaijan in 1920 and held us captive for 70 years. Eventually, in 1991, we regained our independence. In the newly independent country, everything was very difficult.

During those challenging years, I spent most of the money I was given money for food from my parents for lunch at school and spent it on various books and magazines, and reading has been my main occupation ever since. I also cut and collected interesting articles and pictures about history, culture and music from various old newspapers, and later combined them to make albums and books and donated them to my school library.

At the same time, I went to a drawing club and made amazing paintings and illustrations. As a teenager, I enjoyed repairing damaged or torn books I took from the library.

Librarians were surprised to see torn and damaged books in good condition. In short, since childhood I was also interested in restoration, painting and conservation.

Then I received higher education in this field (book studies), became a doctor of philosophy, and got a practice in various western countries, including the United States and Europe, and got acquainted with ancient manuscripts. I have worked at Azerbaijan Institute of Manuscripts since 2014. By the way, this Institute, established in 1950, preserves 40,000 ancient manuscripts and 10,000 early printed books in Azerbaijani, Arabic and Persian.

Baku Institute of Manuscripts is one of the richest and oldest manuscript treasures in the world. Some of the ancient documents here are about 900 years old. Both they and other ancient documents need to be constantly restored, and conserved and preserved in the right climatic conditions.

What exactly do you do in terms of restoration of ancient documents?

After an initial acquaintance with the ancient document, we choose the method of its restoration. It depends on the age, material of the ancient document, the conditions of preservation before coming to the Institute and its current state.

Usually, ancient manuscripts and early printed books are exposed to wear and tear for two reasons - endogenous and exogenous factors. Endogenous factors include the acidification and decomposition of raw materials used in the manufacture of paper or leather. Exogenous processes occur through air

pollution, dusting, mixing with various gases, lack of air, humidity, temperature, various insects, rodents, or careless behavior and force majeure circumstances.

As all over the world, the endogenous erosion of ancient documents at our Institute is caused by exogenous effects, i.e., biological erosion is observed as a result of physical and chemical effects. Our Institute has such ancient documents that they were physically damaged, in other words, somehow torn or damaged by rodents before coming to the Institute. We use the repairing-complementary method in the restoration of such manuscripts. If the edges of the manuscript page are torn, we assemble the torn or missing part, mainly using rice paper.

In this case, we try to match the color and thickness of the attached paper to the material of the manuscript. If, for example, the manuscript is damaged in the middle and part of the text is lost, then in addition to assembling the paper on that part, we also perform artistic and calligraphic complementary work.

We read those ancient texts written in Azerbaijani, Arabic or Persian and determine which parts are missing, and add those parts to the manuscript with the same handwriting. For this, we have to compare the text of the manuscript with copies from other parts of the world.

If the cover of the manuscript is damaged, then we either partially restore it or replace it with a new one. We try to preserve the identity of the manuscript and prepare the new cover matching the old one. All this is a very difficult and time-consuming process. Sometimes it takes 6 months to 1 year to restore an ancient manuscript.

I would also like to say that we keep a record of the restoration we have done on any manuscript and write down the changes in the passport of the manuscript so that in the future those involved in this work would not think that it was falsified when they find new parts.

You touched upon an interesting topic. Does paleography still have the problem of fake ancient manuscripts? In general, how do you determine the authenticity of ancient documents?

Unfortunately, paleography has long been familiar with the problem of fake “ancient manuscripts”. Since the national and moral value and historical significance of ancient documents are very high, forgers who want to make profit from them can make fake “ancient” manuscripts in various ways.

For example, in the 1960s, German conservator Konrad Kujau claimed to have found Hitler’s manuscripts (64 volumes) and sold them to Stern magazine. In fact, the manuscripts were made by Kujau himself. He did it so professionally that no manuscript expert understood that they were fake for a long time.

Twenty-five years later, it was found out with the help of new technology that Kujau’s manuscripts were fake. Or, let’s mention the Old Testament manuscripts of the third century BC found in Qumran (Qumran Manuscripts or Dead Sea Scrolls), in 1947.

In 2017, Museum of the Bible in Washington obtained 16 fragments of those manuscripts from Iraq National Museum. However, in 2018, the Museum doubted the authenticity of the fragments and sent them to the Federal Institute for Materials Research and Testing in Berlin for verification.

3D microscopy, infrared spectroscopy and energy dispersive X-ray analysis taken in Germany, as well as chemical analysis of the ink and natural sediments showed that all the fragments were forged and created in the twentieth century.

Of course, it does not mean that Dead Sea Scrolls are forged, but the Museum of the Bible obtained imitated copies of those manuscripts.

Our Institute also pays particular attention to these issues.

We first check the material and ink color of the ancient documents we obtain.

As a result, we can determine the age of the manuscript. For example, by looking at the paper of a manuscript, we identify when and where that paper was produced. If special watermarks appear on paper when it is exposed to light, it means that the paper was made in Europe during the 13th-17th centuries.

If there are no watermarks on paper, it means that the paper was produced in the East. Certainly, we also analyze the text of each manuscript. Sometimes the manuscript is really ancient, but its text does not belong to the person named as the author. To make it easier for our readers to understand, let me give you an example: let's say a museum obtains the ancient manuscript of a sonnet that is claimed to belong to Shakespeare. All the analyses show that the manuscript's material really belongs to Shakespeare's period, i.e., the paper, the calligraphy are of the 16th and 17th centuries.

However, a philological analysis of the text shows that the sonnet is not Shakespeare's and was falsely written in his name.

Although such ancient manuscripts are not considered to be physically forged, but they are considered to be philologically fake.

What is involved in terms of restoration of ancient books, documents and records?

The problems of ancient books and documents are very similar to those of ancient manuscripts. The only difference is that old books or early printed books are much younger than manuscripts. When we say an ancient book, we mean books published after the 15th century. Whereas the oldest manuscript kept at our Institute today is the 12th century's manuscript (copy of the Ismail Al-Jawhari's *Taj Al-Lughah Wa-Sihah Al-'Arabiyah*). But the oldest printed book preserved at our Institute belongs to the 18th century. This is "History of Amir Timur", published in Oxford in 1783. It shows that early printed books are in a better condition than ancient manuscripts because they are much younger. However, early printed books are exposed to many bacteriological, mycological and chemical effects and need to be restored as well like ancient manuscripts.

Ancient books are exposed to microorganisms that lack a membrane-bound nucleus, i.e., bacteria, when left in a damp place for a long time or in contact with water. Such bacteria wear parchment, leather, gelatin and glue in ancient manuscripts. And in early printed books, it destroys the cellulose of the parts containing the linen- and cotton-based old mass paper and thread. It is very difficult to deal with this type of wear, because, as a rule, it is impossible to monitor the progress of bacteriological erosion.

In this sense, restoration is of little help in eliminating the consequences of bacteriological erosion. For this, it is necessary to properly organize conservation, i.e. storage, so that ancient manuscripts and early printed books are preserved in the right climate conditions. We strive to protect ancient documents from bacteriological erosion. The practices of the USA and Great Britain in this area in recent years are also very interesting.

As a result of development of the mining industry in the late 19th-early 20th centuries and its decline in recent years, millions of square meters of idle, depleted and abandoned mines, especially salt deposits, began to commission again. Millions of manuscripts are now preserved in such mines owned by the US National Archives (mines and fields in Kansas, Missouri and Illinois).

More than a half of the manuscript fund (it means, 10 million ancient documents) of the British National Archives is preserved at a depth of 3.5 km in Winsford rock salt mine located far from the center. The main reason is, firstly, that these places are unused, and secondly, that they are at a constant temperature (59-68 F) and normal relative humidity in all seasons. As you know, salt has a very high absorbing capacity.

If ancient documents are exposed to not bacteriological, but mycological erosion, i.e., if the pages are already damaged or have just begun to be damaged by microscopic fungi, then we use the method of chemical restoration-cleaning.

For this, the manuscripts are kept in a special chemical liquid for a certain period of time or only damaged parts of the document are washed and dried in a special way with the same substance. But unfortunately, it is impossible to completely destroy the embryos of the fungi that are spread in the books.

They can sometimes live up to 40 years on the pages of ancient manuscripts and early printed books. In order to destroy such resistant fungi and perform successful restoration on the manuscript, we have

recently begun to use gamma rays, i.e. radiation technologies. This is a kind of know-how in restoration and conservation of ancient manuscripts.

Can you explain what is involved in the digitization of papers and artifacts and documents?

Digitization of ancient manuscripts requires a special approach. It is clear that we cannot digitize such ancient and fragile documents on an ordinary scanner.

For this, we use special V-shaped, planetary scanners. The manuscript is placed in a special part of the scanner called “cradle” in not fully opened position, and then its image is captured by several high-resolution digital cameras attached to the top of the scanner, and the images are converted to PDF and transmitted to the server.

Certainly, the digitization of manuscripts is of great importance. However, there are certain problems here as well: first, when the manuscripts are brought from the fund to the special department for digitization, they have to stay in an unsuitable climate for several hours and are exposed to infrared and ultraviolet rays. An ancient manuscript can be damaged even by the temperature of the touching fingers and human breathing. So, you should not wear only gloves, but also a protective mask when digitizing manuscripts.

The second problem is on what media to store the manuscripts after digitization. In the past, copies of ancient manuscripts were transferred to microfiches and microfilms, then to floppy disks, and then to CDs. Since the media were changing almost every 10 years, the new computers could not read the data on the previous media. Now, for example, we cannot read the manuscript on a floppy disk, tomorrow it will be difficult to read the electronic manuscripts we transferred into a CD, so who can guarantee that future generations will be able to read the digital format of ancient manuscripts stored in servers or cloud today? After all, we digitize manuscripts not only for nowadays, also for the next generations. What if 50 years later, computers don't recognize our memory devices? It is such a paradoxical situation.

The Magna Carta is probably the single most well-known document at least in Europe that has been preserved. Why are such documents so valuable?

I agree with you. The Magna Carta is indeed one of the oldest manuscripts known.

In general, manuscripts of the 10th-13th centuries are considered to be especially rare in paleography. However, many ancient manuscripts, including the Magna Carta, were important only in their period. In the Middle Ages, the Magna Carta was a document of legal and political significance that affected the economic life of a large state. Today, this document, written in Medieval Latin, has no purpose.

What makes it and other such manuscripts valuable is their age and their belonging to ancient history and culture. This is not only in paleography, but also in archeology and paleontology.

For example, if a tooth of an Azykhanthrop living in the Azykh Cave (Azerbaijan), one of the oldest human settlements, was preserved today in one of the museums of the United States and the Azerbaijani government wanted to repatriate it, it would not be possible and vice versa. However, in both countries, dentists pull out the teeth of thousands of people every day and throw them in the trash. So, the matter is not the tooth, but the age of it. Mankind is proud of such discoveries, and countries identify their culture, history and scientific development with such ancient manuscripts and artifacts.

What is the most important book or document that you have worked with or tried to preserve?

I would like to name 4 manuscripts. These manuscripts, which are important for the whole world, are unique and are preserved only in Azerbaijan, at our Institute.

They are one of the few manuscripts included in the UNESCO Memory of the World register due to this uniqueness.

First of them is Zakhirayi-Nizamshahi (Supplies of Nizamshah) by Rustam Jurjani. The 12th century scientist Rustam Jurjani's work Zakhirayi-Nizamshahi is about medicine and pharmacology. It is believed to have been copied in the 13th century. It consists of 487 pages, copied with black ink in a

beautiful, delicate Nastaliq calligraphy, the first page of the manuscript is decorated with golden ink and ornaments. The text also is framed with gold.

The second unique manuscript is *Al-Makala as-Salasun* (Thirteen Treatise) by Abu al-Qasim al-Zahravi (Abulcasis). The most valuable and interesting part of this encyclopedic work is the XXX volume on surgery of the 30-volume work on medicine "*Al-Makala as-Salasun*" by the great Arabic scholar Abulcasis, who lived in the Spanish-Córdoba caliphate in the X-XI centuries. The book describes about 200 surgical instruments and explains the rules of their use. The 156-page work was copied in the 12th century in black ink. The surgical instruments are clearly marked with black ink.

Third unique manuscripts is *Al-Qanun Fi at-Tibb* (Canon of Medicine, The Second Book) by Abu Ali Ibn Sina (Avicenna). The manuscript attracts readers attention with its antiquity and perfection. It was copied in 1143. The size of the 190-page book is 24x15 cm and the size of the text is 18x11 cm. There are 18-20 lines on each page. Copies are written in black ink, clear, delicate handwriting, chapter headlines, names of medicinal plants are written in red ink.

And finally, Mahammad Fuzuli's "*Divan*" (Collected poems) in Azerbaijani. The great Azerbaijani poet Fuzuli (1494-1556) often considered one of the greatest contributors to the diverse tradition of Azerbaijani literature. The Baku manuscript of Fuzuli's "*Divan*" in his native language, copied in 1572, 16 years after the poet's death, is considered to be the most authoritative copy of this "*Divan*".

You know, not every specialist is lucky enough to work with these unique manuscripts and restore them. Therefore, I consider them the most important manuscripts that I have worked on with my colleagues.

How important are these documents in terms of your history? And how many scholars seek your assistance in locating certain documents or at least xeroxing them or digitizing them for reference?

- My observations show that the vast majority of ancient manuscripts in libraries and museums around the world are related to religion and literature, because throughout history, people have been able to preserve religious and fiction books more. The themes of the manuscripts at our Institute are also mainly related to religion and literature.

As I mentioned earlier, such manuscripts are important as part of the national morality and culture of people. Their historical significance in the modern context is mainly their age.

The mirror of a country's history, certainly, is the documents related to the history of that country. Baku Institute of Manuscripts preserves hundreds of ancient documents, manuscripts and books related to the history of Azerbaijan. I consider those manuscripts more important in terms of learning our history. But, of course, nations are not only known by their history. In general, in my opinion the preservation of ancient manuscripts by modern people as valuables, whether more or less important, is already a historical event.

If, for example, an 12th-century manuscript is preserved with great difficulty in Azerbaijan today for handing down the next generations, it is not only a contribution to Azerbaijan, but also to the United States, France and Italy and the world.

Or, the preservation of ancient manuscripts in the United States is not only a great step for the American people, but also for the people of Azerbaijan, and the world. It means that ancient manuscripts have historical significance not only in separate countries, but also around the world as a whole. Otherwise, hundreds of specialists from around the world would not apply to the Institute of Manuscripts every year.

In 2020-2021, we responded positively to 560 requests of researchers, most of which were electronic due to the pandemic. The partial digital library of manuscripts established since 2014 (not yet fully completed) helped us respond these requests more effectively.

In general, specialists in ancient manuscripts make requests that are generally considered universal. Specialists on ancient manuscripts at the world are similar in terms of work methodology. In other words, experts from all over the world work with ancient manuscripts and restore them in a similar way

with minor national and philological differences. There is a unique consensus and cooperation atmosphere in the field of paleography.

For example, my colleagues are invited to European and American libraries to read and catalog oriental manuscripts there, because there are very few or no specialists there who can read ancient manuscripts in Turkish, Persian and Arabic. If you ask how come Azerbaijani manuscripts are, for example, in the United States, Europe or Near East region, I will give you a brief historical reference. Today, there are about 12,000 Azerbaijani manuscripts in libraries around the world.

Most of them were first taken to Russian Empire as a result of the looting policy of Tsarist Russia, which had been attacking Azerbaijan since the Middle Ages, and then sold to various countries. I cannot talk about all the details of that history in this interview, and I want to say again that like ancient manuscripts, experts in ancient manuscripts have no boundaries as well.

What are some of the challenges that you face in your work?

There are many challenges regarding the work with ancient documents. The main problem is that regardless of how we preserve the manuscripts, how we restore them, time does its work and they tear down. This is the case all over the world.

We are sure that in 200-300 years, most of the ancient manuscripts that exist today will be destroyed by natural wear and tear. The question of how to hand down the manuscripts to the future is something that gets paleographers around the world thinking.

Certainly, there are other technical issues: as I mentioned earlier, the manuscripts are restored with special papers made of rice flour. And such papers are not produced in Azerbaijan. Also, many restoration tools and chemicals are not produced in Azerbaijan. Our Institute orders such things from Turkey, United States and Japan. They are very expensive. Moreover, it is not possible for example, to glue the manuscripts, their covers with ordinary adhesives. We use a special adhesive. This is also very difficult to find.

In addition, we would like to have 3D microscopies, spectroscopies, special X-ray CT scan, and other microscopic and microchemical test devices that analyze the paper, ink, materials of ancient manuscripts with high accuracy, like in Germany, for example.

What have I neglected to ask?

After this conversation with you, I believe that you are very well versed in our field. In this sense, I think that you have asked all the questions that interest me. Thank you for such interesting questions. I hope my answers are helpful.