

CONSERVATION OF RUSSIAN PUBLIC HEALTH POSTERS
IN THE ALAN MASON CHESNEY MEDICAL ARCHIVES
OF THE JOHNS HOPKINS MEDICAL INSTITUTIONS

The subject of my presentation is a conservation of the Russian posters. However, the historical factor of these works seems to be very interesting. Therefore, I have decided to include quite extensive elaboration of this aspect.

Anyone who has had experience in health education will realize that powerful agents are necessary to stir up the sense of responsibility. This was especially true in Soviet Russia where so many household customs and religious traditions continued with illiteracy to block personal and social hygiene. No matter how enlightened was the policy of the Commissariat of Health, it was to the masses of the uneducated people that it had to appeal or it was of little value.

In the later half of the nineteenth century two ancient forms of communication - writing and pictures - joined developments in the technology of printing to create a pictorial poster.

The most significant development in the history of the medium occurred in Russia. In 1919 a new type of poster appeared there. It was known as the "Satire window of the Russian Telegraph Agency". The frames consisted of illustrations with captions that resemble the cinematic sequence of the comic strip.

With a founding of the socialized state, health was immediately recognized as one of the basic needs. Disease was seen to be harmful not only to the person suffering from it, but to the state of which he is an economic and social unit. Problems of public health were considered as political. Here the struggle with Tsar's generals and struggle with epidemic of typhus were put on one level.

The reorganization of the health system in post-revolutionary Russia came at the time when prevention was the slogan in the world. It was a new point of view for Russia and fitted well into the new Russian sense of values. Many of the serious diseases had been serious only because of the lack of attention to personal and public hygiene. Where the supplies of drinking water were pure, typhoid fever and cholera did not flourish. Prevention was primarily aimed at the reduction of tuberculosis, venereal disease, and infant mortality. Kissing of sacred images, eating from a common bowl of soup, giving to young children of food partially chewed in an older person's mouth were all potential hazards of contamination. To eradicate these sources of infection required more than a doctor's prescription.

Every device of advertising was turned to the business of selling health. The exhibitions were the most ambitious and most universal means of attracting attention; the posters were the

core of them, many having been executed by well-known artists. Statistics were presented in arresting diagrams. The juxtaposition of the "Right Way" and the "Wrong Way", of "Before" and "After" were made so striking and so apt that the dullest intellect must have grasped the meaning.

For those who lived too far from the large cities the Central Commissariat arrange traveling exhibitions. The largest of these were in railway cars which were switched onto sidings at small stations and gave several days', sometimes several weeks', entertainment to the peasants of the neighborhood. Lectures, little plays, posters and literature for home reading were some of the methods used in this sort of propaganda.

The posters I am going to talk about are from the collection of the Alan Mason Chesney Medical Archives of the Johns Hopkins Medical Institutions. They were brought to the United States in the early 1920s by William Andrew Horsley Gantt.

Dr. Gantt was the medical director of the Petrograd Unit of the American Relief Administration from 1922 to 1923. While in Russia he travelled extensively and collected photographs and posters depicting the state of public health in the Soviet Union following the Revolution.

When the Paper Conservation Department of the Milton S. Eisenhower Library of the Johns Hopkins University received the collection of posters they were in very poor condition. With the exception of 5, they were rolled up in one massive bundle and individual posters were more or less consolidated. It was not possible to identify or count them at this point.

At first the objects were unrolled, interleaved with permalife bond sheets of paper and left for about three weeks under pressure of light weights. Afterwards, I was able to separate most of them and identify. We knew that we were dealing with a total of 39 posters.

Executed by a color photolithography, the posters were printed on clay-coated, ground wood paper. The paper was extremely brittle and highly discolored. pH of the randomly selected samples was cold water extract - 4.5 and hot water extract - 4.0.

Considerable damage had occurred to the posters from exposure to excessive moisture and subsequent fungal attack. Depending on the location of the posters within the roll, damages were smaller or greater. They mostly occurred at the top right

corner, right side edge and in the areas in the middle and to the left side on the bottom edge. Heavy clay coating of the paper contributed greatly to the high brittleness of the paper but at the same time as an alkali, it probably served as a buffer for the very acidic mechanical wood pulp paper.

It was decided, that because of the powdering condition of the coating and printing ink layer, only soft Japanese brushes were to be used for the dry cleaning process. During that process loose fragments were identified where possible.

Despite the very pulpy and unstable appearance of the posters an attempt was made to wash each separately in water. The process turned out to be quite successful. Water, with the addition of methylcellulose solution as a cleaning and surface-active agent, made it possible to remove all soil, dust, and other particles left after dry cleaning. Each poster was soaked for 0.5 an hour, then cleaned using soft brushes, rinsed, and air dried.

After washing the objects were sized with 0.5% methylcellulose solution and flattened in a press or between paper making felts, depending on the size of the poster; there were four of 5 x 3 foot size, others were closed in about 25 x 35 inches size.

Because of the physical condition of the paper and the amount of losses in a total of 39 posters, I considered leafcasting as the most feasible method of filling in and consolidation of posters. In preparation for this process I was faced with about 30, extremely brittle jigsaw puzzles.

Knowing that this stage of the mending process has to withstand handling and especially wetting during the leafcasting, I decided to use as an adhesive an acetone solution of cellulose acetate and reinforce some of the repairs with very thin japanese mending tissue.

However, use of a cellulose acetate is still considered controversial by some conservators, in my practice I found it as a very effective, convenient and yet safe type of adhesive. This subject could be a topic of a separate presentation, but let me explain it briefly.

I believe that the hesitation towards use of cellulose acetate among our colleagues is caused by the infamous cellulose acetate film used in the past for lamination of paper. However, there is a significant difference between the cellulose acetate in my work and the one used for the laminating. To my knowledge premature aging of the laminated paper was caused by some components added during the production of the film. Particularly harmful seem to be plastisizers. In the majority of manufactured

films the cellulose triacetate was used instead of acetate.

An information received on my request, from the manufacturer (Kodak) appears to be consistent with my findings. I have been using a solution made with pure cellulose acetate powder dissolved in acetone to the consistency of whipping cream; because of the very high volatility of acetone it is difficult to determine an exact ratio.

The adhesive is applied with a small, soft brush to the edges of mended parts, which are immediately connected. A gentle pressure is applied with bone folder through a silicon-release paper. From my stand point the main advantages of using this compound as an adhesive are: 1) doesn't soften and cockle the paper, 2) allows wet processes after mending, 3) is easy and allows quick mending, 4) is reversible. In my 10 year experience with cellulose acetate in this form I did not find any harmful side effects.

After sizing and flattening, I found that the paper in some areas changed its dimension. Here again the non-water soluble adhesive was very helpful to align the edges before final humidification and pressing.

The leafcasting process was conducted in the Conservation Laboratory at the Folgers Library in Washington D.C. Here I

would like to acknowledge my great appreciation to Frank Mowry for his participation in the project with his expertise and skills in utilizing his leafcaster. The paper pulp used was made in-house and consisted of the mixture of three parts of 100% linen and one part Ingres papers.

Because of the large size, four of the posters were deacidified with WEI 'TO #2 solution by brushing; others were treated with water solution of calcium hydroxide. pH after treatments of the randomly selected samples was: cold water extract - 7.4 and hot water extract - 6.5.

After drying and final flattening all of the posters were encapsulated in 3 mil ICI Melinex 516 on the Minter/Malosh ultrasonic welder.

At present the collection of Russian posters has been translated and catalogued and is available to researchers in the Chesney Medical Archives of the Johns Hopkins Medical Institutions in Baltimore, Maryland.

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