

Roza Kuleshova Found Peeping

from our Soviet Correspondent

A SERIES of experiments has recently been carried out by a group of Russian scientists, to investigate under controlled conditions the "cutaneous-optical sensitivity" of Roza Kuleshova from Mizhnii Tagil in the Urals, who, several times during the last decade, has been cited as an example of ability to perceive colour and read print by tactile means only. The experiments were designed and carried out by a commission of five, consisting of L. Voronin (Head of the Department of Higher Nerve Activity, Moscow State University), M. Smirnov (Senior Scientific Assistant at the Institute of Problems of Information Transmission of the Academy of Sciences of the USSR), T. Ratanova (Senior Scientific Assistant at the Institute of Psychology of the Academy of Pedagogic Sciences), I. Dashevskii (a practising clinical psychiatrist from Moscow), and V. Knorre (Candidate of Technical Sciences).

With the cooperation of the subject, four series of experiments were carried out, each with a different method of eliminating visual sight. It was considered that an experiment would be classified as "successful" only if the number of correct answers was so great that "it could not be produced by pure chance".

Experiment 1. The subject sat in front of a plywood screen 1.5 m square; her arm passed through a hole in the screen, which was equipped with a sewn-in sleeve of opaque material, fitting snugly about the forearm. The test objects were eighteen pencils and buttons of five basic colours. The best run gave 7 correct answers.

Experiment 2. The subject's face was covered by an opaque veil. The test objects were coloured postcards showing works of art, and illustrated pages from a children's primer, two sets of 10 objects in all. In the first, second and ninth attempts no answers were given at all. In the third, fifth and seventh, they were "like on colours", "different colours" and simply "colours". (They were, in fact, all reproductions of works of art: "Portrait of a Girl in Black", Van Dyke's "Self-portrait" and Gauguin's "Woman on the Seashore".) To another postcard (attempt 4), she simply replied "like on the table". Similar results were obtained in other tests. Thus in all the experiments where all possibilities of visual sight were excluded, Kuleshova showed no special talents of any kind.

Experiment 3. A control series of experiments was then run, using a black blindfold (which has been the usual practice in public demonstrations). In this case, Kuleshova seemed quite at ease, always gave correct and exact answers, described the subjects of the postcards in detail, identifying the colours of the various parts, and read printed text fluently.

Experiment 4. This was basically a replication of the tests of 1963-64 which indicated that the subject did possess cutaneous-optical sensitivity. These tests were carried out using a spectro-anomaloscope to produce monochromatic beams of different colours.

According to the experimenters of 1963-64, Kuleshova could distinguish by touch the colour of the light emerging from the instrument, scoring 17 right out of 17 in the run of September 17, 1963, and almost equally well in subsequent runs. (Her lowest score was 54 out of 64.)

The first run in the current series of tests gave the following results. (Four colours of light were used, red, yellow, blue, green.)

No. of attempt	Wavelength of light in nanometres	Colour of light	Kuleshova's answer
1	580	Yellow	Blue
2	470	Blue	Yellow
3	470	Blue	Blue
4	470	Blue	Yellow
5	530	Green	Red
6	470	Blue	Yellow
7	580	Yellow	Green
8	580	Yellow	Green
9	640	Red	Blue
10	640	Red	Red

Thus there were only 2 correct answers out of 10. A further run of 12 attempts gave only 3 correct answers. Then the subject proposed that the number of colours should be reduced to three; in this case she gave only 8 correct answers out of 20.

With the exception of the third series of experiments, in which an ordinary blindfold was used, the proportion of correct answers all lie well within the limits of probability.

Accordingly, a careful survey was made of the experimental data from 1963-64, and it was found that, once again, only an ordinary blindfold of black cloth had been used, and that the design of the experiment was such that the subject "could have used ordinary sight and hearing to obtain information about the colour of the light in the spectro-anomaloscope".

The conclusion is therefore that, in plain language, Kuleshova has been caught peeping. But even if she herself possesses no special talent, does this mean cutaneous sight does not exist at all?

As one might expect, after the salutary warning of their discoveries in the Kuleshova case, the members of the commission are wary and noncommittal on this point. Rather do they wish to stress the need, when dealing in such unexplored fields as the various aspects of ESP, for especial care in the design of experiments so that information via the normal sensory channels is eliminated beyond a shadow of doubt. Any deviation from this principle, they warn, leaves the way open to false claims and can only be harmful to the true scientific investigation. The verdict may still be "not proven", but one feels that it will be long before any Russian psychologist or biologist puts forward any claim to have established the existence of "cutaneous sight".