

NINA S. KULAGINA: A STRONG CASE FOR PK  
INVOLVING DIRECTLY OBSERVABLE MOVEMENTS OF OBJECTS<sup>1</sup>

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BACKGROUND, PURPOSE, AND PREPARATIONS

A number of publications have already dealt with reports and evidence from movie films (Herbert, 1970a; 1970b; 1970c) which suggests that Nina S. Kulagina has been able to move static objects of some substance (up to 500 g. weight) on many occasions apparently with a high degree of control. Much of the original evidence was mainly based on unpublished reports by Russian scientists (Sergeev, 1970a; 1970b; 1970c; 1971). However in recent years a number of scientists from the West have also reported firsthand observations (Herbert, 1973; Pratt & Keil, 1973; Ullman, 1971; 1974) and although these took place under circumstances which cannot be regarded as laboratory conditions, it was possible to control a number of variables and to reduce the probability of alternative explanations. B. Herbert's report (1973) suggests that all counter hypotheses for some of the phenomena observed can be rejected with confidence. Although we agreed with B. Herbert's findings we attempted in a further visit to verify the paranormal nature of the phenomena in a perhaps simpler manner, rejecting in

1) After some discussion the authors agreed that there is some advantage in a new terminology distinguishing between PK which can be recognized on the basis of statistical analysis only and PK which is directly observable. The latter has recently been referred to as PK on static objects. This term seems to be restrictive because PK may be directly observable even if an object is in motion before on account of PK this motion is changed or stopped.

particular again any suggestions that invisible threads might have been responsible for the movements but we also wanted to obtain a good movie film record of the phenomena.

Our visit to Kulagina did not come at the most convenient time for her and initially there was some general reluctance as well as some expression of frustration on her part suggesting that she was somewhat tired of these demonstrations which she had carried out for years and which had not led to an unequivocal acceptance of her abilities.

However gradually Kulagina became more and more positively motivated and she demonstrated movements with objects about 20 to 30 times over a period of time lasting about thirty minutes. The attempts to move objects were interrupted for periods of about 5 to 10 minutes on two occasions when Kulagina tried to create a sensation of heat by placing her hand on J.F.'s and J.K.'s arms.

We had brought along the following objects for the first time:

- One clear plastic cube (about 10 cm long on each side as sold in some stores for the display of photos) with a non-magnetic cylinder resting on the bottom surface and being fastened to one wall with a very weak thin expansion spiral steel spring. The spring was nevertheless strong enough to slide the cylinder back to a certain range of positions. Kulagina had moved this cylinder by itself previously for J.G.P. (Pratt & Keil, 1973). The cube has one open side which was usually at the top.
- One clear plastic cube (as above) with one open side and with a table tennis ball suspended (with a similar steel spring) from the centre of the top.
- One compass weighing approximately 35 grams.

The function of the steel spring would be fairly similar to that of a thin rubber band. (The steel spring was purchased at a novelty shop as one long piece from which a brightly coloured plastic bird was suspended)

Throughout the whole demonstration J.F. was able to watch Kulagina without any obstruction, or other tasks which might have diverted his attention. He remained within a distance of 70 to 100 cm from the objects throughout the demonstration. H.H.J.K. was to some extent occupied with taking movie films and particularly on account of some difficulties with photo lights was not always able to observe all phenomena. All demonstrations were carried out under good illumination conditions and most under more intensive photo lights bright enough to take 25 DIN movie film.

For a brief meal prior to the demonstrations, the table had been covered with a white (with some patterns) table-cloth which remained on the table throughout. There was no suggestion that the tablecloth could hold invisible threads and plates in connection

with the meal, were moved quite normally over the area of the table within which Kulagina later carried out her demonstrations.

Initially Kulagina made a number of short attempts to move the objects in the cubes without definitely being successful. It is very likely that at times she managed to set the table tennis ball in oscillatory motions by paranormal means. However, part of the movements were probably normal movements with the ball not being completely at rest to start with. It is also possible that her hands movements coincided with small body movements which in turn via chair, floor and table were transmitted to the table tennis ball keeping it in an oscillating motion. Nevertheless, it is quite likely that some of the oscillating motions were initiated, increased or sustained by paranormal means. But since it is difficult to separate the normal aspects of these motions we do not regard these pendulum motions as particularly important.

When Kulagina herself was not quite satisfied at an early stage with the response of the objects in the new plastic cubes we put the compass which we had brought along on the table and she was very soon (this refers to a time period of perhaps one minute or less) able to move not only the compass needle but the whole compass itself. This was the first clear sign of a movement of a static object. Kulagina also proceeded to move an inverted small glass placed inside an inverted large wine glass. When it became clear that she was at least able to move the kind of objects which she had moved before, we intentionally created a pause suggesting that she should try to produce with her hand a heat sensation on J.F.'s arm while H.H.J.K. could use this break to set up his movie camera.

It seemed inappropriate in terms of the general psychological conditions to start filming from the very beginning when Kulagina was still uncertain to what extent she might succeed. While such a complete film record would obviously have been more desirable we did not wish to take the risk that filming at too early a stage might inhibit further attempts.

H.H.J.K. had prepared a photo lamp attached to the camera which seemed strong enough for normal colour films and he had also checked out its two pin plug on Russian power points. However, the available power point was in use for other appliances and a three-way outlet with a free opening was too small. Two other photo lamps which we were able to secure and which fitted into the outlet solved the problem initially. However they had to be placed in a fixed position with somewhat unstable clamps. Unfortunately both clamps slipped off after a short time and both photo lamps broke. H.H.J.K. was able to use the camera photo lamp instead of one of the stationary ones but mainly on account of a

fixed reflector being in an unsuitable position for the camera lamp, the illumination was somewhat marginal. In spite of this approximately 60 ft. of super eight film gave a fairly clear record of some of the phenomena. Actually the events filmed turned out to be technically reasonably adequate. Nevertheless starting with the filming after some movements had already been achieved, and on account of the light problems only about one quarter to one third of the total phenomena were recorded on film.

#### MOVEMENTS RECORDED ON CINE FILM

As the film presents the clearest record of these events they will be described first.

1) Movement of inverted glass about 65 mm x 35 mm put over a green wooden object inside a larger inverted wineglass. The smaller glass moved from one edge of the larger glass to the other, a distance of approximately 20 mm.. The movement occurred towards Kulagina, with one short interruption approximately halfway. On the line of movement, that is, between the glasses and Kulagina was the compass which did not show any movement as one might expect if an invisible string had been used. The glasses were in a position about 25 to 30 cm. from the edge of the table. The green round wooden object situated inside the smaller glass was probably a pepper or salt shaker. No movement of this object relative to the smaller glass was noticed. The green object was resting against the end wall (with respect to the direction of movement) of the small glass; hence as soon as, and to the extent to which the small glass moved, the green object moved as well. If it was argued that the green object had a steel interior and that it could be moved with a strong magnet from underneath the table, then it was precisely in a wrong position to produce the movement of the glass which actually took place.

2) The whole compass housing situated almost right at the edge of the table, made several turning movements in a counter-clockwise direction, turning approximately 70 degrees and also sliding somewhat closer to Kulagina, perhaps 15 mm..

3) The table tennis ball was first moved down and then towards Kulagina (the open side of the cube being on Kulagina's side and the cube being situated close to the edge of the table). This movement was slow and can in no way be explained on account of oscillations which were discussed above. The beginning of this film sequence shows the ball already touching the bottom surface or almost doing so. This can be judged from the position of the ball and its reflection on the bottom surface. After a short period of resting on the plexiglass surface directly beneath the

point of attachment of the spring, the ball moved a very short distance (approximately 5 mm.) towards Kulagina and then made two or three vertical movements without quite returning to its normal suspension position. The ball then made contact again with the floor of the surface and continued to slide on this surface towards one side of Kulagina until it reached almost the edge of the cube.

It must be kept in mind that the ball is normally suspended about 20 mm. above the bottom surface. Consequently even when it appeared to rest on this surface a force was necessary to keep it there. The small vertical movements referred to above may correspond to positions between jerking movements when Kulagina moves say a glass on a horizontal surface. If this comparison is justified, it follows that during these stop positions a force may still be active (although not enough to continue the sliding movement) because the table tennis ball did not return to its normal position. In other words, the force was still expanding the spring to some extent. The spring was considerably expanded when the ball still in contact with the floor of the surface was finally moved almost to the edge of this surface. As soon as the force holding the ball was released the spring jerked the ball back with a quick movement. Although the angle from which this film was taken was not quite ideal it seems impossible to duplicate this movement using a string to pull the ball without creating a noticeable difference in the movement of the ball. Apart from the difficulty of attaching a string to an object moving about at the slightest touch and being continually in full view of J.F. and H.H.J.K. it seems very difficult and it may indeed be impossible with a string to produce a slow movement both straight down and towards the edge.

4) Movement of the small green object and of the small inverted glass discussed under (1). The green object was situated approximately 25 cm. from Kulagina and moved in a direction towards her. In the line of movement was the small glass, the nearest edge being approximately 4 cm. away from the green object; and further in the line of movement was the cube containing the cylinder. The nearest edge of the cube was approximately 15 mm. from the small glass.

The green object moved in a fairly straight line towards the small glass (i.e. towards Kulagina). After the green object touched the glass they both moved together 15 mm. further until the glass touched the cube. There was no noticeable movement of the glass or of the cube while the green object was moving by itself and there was no noticeable movement of the cube when both the green object and the glass moved together. The total movement

occurred in several stages consisting of 3 to 5 more or less clearly separated jerks. The way the movement of the green object together with the glass occurred, it is possible the glass was pushed along on account of the green object and not moving on its own. Following on from the discussion under (1) it could be argued that this movement could have been produced with a magnet from underneath the table if the green object contained an iron center. While this possibility is mentioned there was not the slightest indication that anything like that took place. A very substantial magnetic force would have been required to act in this way from underneath the table.

5) Movement of the small inverted glass alone inside an inverted wineglass. The situation was essentially the same as under (1) except that the green object was not involved at all. So magnetism can be ruled out with certainty.

#### FURTHER MOVEMENTS OBSERVED BY BOTH INVESTIGATORS

6) Movements of the table tennis ball different to those described under (3) but also of a kind that could not be explained on the basis of perhaps normal pendulum movements. When the ball was moving like a pendulum (approximately 15 mm. either way from the central position), on two separate occasions an additional fast movement occurred, knocking the ball right against the side wall with an audible noise. It is also difficult to see how this movement could have been faked with the use of an invisible string. However, this movement was fairly fast and it was difficult to observe whether the ball touched the sidewall in the middle or perhaps closer to the edge toward the open side.

Other movements were more of the kind as described under (1), (2), (4), and (5).

#### SOME CONSIDERATIONS FOR THE FUTURE

While no field study even under excellent conditions can be regarded as absolute proof, the observations with respect to some of the details discussed as well as with respect to the overall impressions of the total performance gave both J.F. and H.H.J.K. very strong confidence to regard the observed phenomena as genuine occurrences of PK.

Particularly since Herbert (1973) had come to a similar conclusion from the point of view of a physicist, it seems now desirable to conduct research with Kulagina in a somewhat different manner. Up to the time of Herbert's and this investigation a major consideration was always to insure that the movements are genuinely of paranormal origin. While future work should also try

to maintain controls to the extent it is possible to do so, it seems reasonable to assume that the movements produced by Kulagina are indeed based on PK. Consequently it seems desirable in the future to test the dimensions of PK as well as other theoretical aspects for which a suitable test can be devised. For this purpose it would be desirable if all scientists who are likely to visit Kulagina in the future could keep in touch with each other and with anybody else who is interested in the PK and related theoretical considerations.

To find an important question that could be answered under the limitations that exist during such a field study, is probably as important as the field study itself. Moreover as indicated above it seems highly desirable to present Kulagina with a motivating challenge rather than with the request to produce the same phenomena once more.

#### EFFECTS ASSOCIATED WITH KULAGINA'S "LAYING ON OF HANDS"

It seems in order to describe in more detail the heat sensations mentioned earlier. There is naturally more uncertainty whether these sensations and the associated observations properly belong to the area of parapsychology. Nevertheless, there is a strong suggestion from the way Kulagina uses her hands during a PK demonstration that they may play an important part in her ability to control to some extent the movements of the objects. Consequently a clearer understanding which may be reached about the heat sensations could provide useful information for the basis of her PK performance.

Herbert (1973) had already described that his own sensation was one of unbearable heat and pain which he only continued to endure for the sake of the scientific value such an experience could provide.

J.F.'s experience was similar although perhaps not quite as severe. He felt heat and pain after approximately 30 seconds. The sensation increased in intensity until after 2 to 3 minutes it became almost unbearable. The pain was real but not quite like pain caused by a hot object under normal circumstances.

A section of movie film showing J.F.'s arm after approximately 15 minutes clearly shows red burnt patches as one might expect them on account of sunburn particularly if the subject had little previous contact with the sun. These red marks were still visible several hours later. J.F. was amazed that they had disappeared on the following morning. There were no blisters or other negative aftereffects which J.F. had expected.

While Kulagina put her hand on J.F.'s arm a mercury thermometer

at body temperature was placed directly between Kulagina's hand and J.F.'s arm. The thermometer showed no change. According to Kulagina this seems to be in agreement with the theoretical expectations of Sergeev. We have no details about these but there is no doubt that heat sensations can be experienced on account of physiological changes other than an increase in temperature over an area of the body. H.H.J.K. experienced a similar heat sensation which increased to a level which seemed utterly real and unpleasant but which did not increase beyond this level. Hence no particular effort was required to endure this sensation for a period of several minutes.

Kulagina had a piece of lead approximately 2 mm. thick and 4 cm. wide with which she partly shielded her hand while touching H.H.J.K.'s arm. The subjective sensation was quite definitely that the lead blocked whatever produced the heat sensation. However, it is possible that the lead as a relative cool metallic object simply produced a cooling effect rather than a shielding effect. If the lead acted as a complete barrier then the shield should remain effective over a long period of time. For the length of time that these demonstrations were carried out (about two to three minutes) this seemed to have been the case. However, it is possible that the cooling effect of the metal could have remained effective over a similar period.

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