

THE MEDIUMSHIP OF STELLA CRANSHAW: A STATISTICAL INVESTIGATION

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ABSTRACT

Stella Cranshaw gave three series of sittings to various groups of people between 1923 and 1928. The observed phenomena included raps, flashes of light, levitations of objects and breaking of furniture. The author assigned a number (the 'activity index') to each séance according to the degree of physical violence displayed. He found a significant correlation between the activity indices and the recorded falls in temperature during Series I, together with a significant decline effect. Series II showed no decline effect. There was a significant increase in activity during Series III. Light flashes were more common in séances with a high activity index, but the effect was only marginally significant. Sittings in which women sitters outnumbered men, or in which the numbers were equal, showed higher levels of activity than sittings in which men outnumbered women. This effect was independently significant in all three series. It is suggested that PK might be regarded as some kind of interpersonal field effect, and that interactions between the sexes may be important in its generation.

BACKGROUND

Dorothy Stella Cranshaw (known in the literature as 'Stella C.') was born in 1900 at North Woolwich. She was the daughter of James Henry Cranshaw, a charcoal burner (Hall, 1978, p.192). By the time she met Harry Price, early in 1923, she was 22 years old and working as a nurse in one of the London hospitals. Her family were then living in Southsea, but her letters to Price were sent from 37 Clarendon Road, Holland Park, London, where she was in lodgings. It was during one of her frequent rail journeys to Southsea that she encountered Price, who was on his way home to Pulborough. Price has described how she asked to see the copy of *Light* which he had placed on the seat beside him, and how this led to a discussion of psychical matters and her eventual agreement to sit for him (Price, 1942, p. 83).

As a result of his experiences in Munich with Willy Schneider, Harry Price had come to accept the reality of telekinetic phenomena. However, he did not believe that such phenomena were the work of spirits, and he was somewhat contemptuous of organised spiritualism which, as he saw it, was spoiling young people with natural mediumistic abilities by trying to 'develop' them along lines compatible with spiritualistic doctrine. He was therefore delighted to come across a young woman who was, apparently, totally ignorant of spiritualism and yet possessed of remarkable telekinetic abilities. Stella told him how she had experienced flashes of light, raps, cold breezes and the spontaneous movement of small objects such as matchboxes. The phenomena did not happen very often—perhaps only two or three times a year—but they left her feeling puzzled (Price, 1925). In his later writings Price added the information that the phenomena began after she had first menstruated (Price, 1945, p.278).

Very little is known about Stella's early life apart from the snippets of information in Price's writings. Paul Tabori has a chapter about her in which

he refers to her as "The Gentle Maiden", but he adds little to the information given by Price (Tabori, 1968, pp.103-119). Trevor Hall refers to a "forthcoming study" of her by his associate Peter Bond, but the study was never published and Mr Bond is no longer alive (Hall, 1978, p.193).¹ The original reports of her sittings with Price and others are in the Harry Price Library at the University of London, together with much of the correspondence which passed between them. Some of this material has been published by Souvenir Press in an edition edited by James Turner and reviewed in our own *Journal* by Anita Gregory (Turner, 1973; Gregory, 1973). Unfortunately, the Turner edition is incomplete, inaccurate in places, and lacks an index. It does, however, contain a complete reprint of Price's (1925) book describing the first series of sittings with Stella.

THE SITTINGS

Stella gave three series of sittings for Price and his associates: in 1923, 1926-7 and 1928. In this paper these will be referred to as Series I, Series II and Series III respectively. Only Series I has been fully written up and published in book form (Price, 1925). For Series II the reader must consult the original reports in the Harry Price Library or rely on the abbreviated descriptions given by Turner (1973). A detailed description of Series III was given by Lord Charles Hope in the *British Journal of Psychical Research* (Hope, 1928); there are several small discrepancies between his account and that given by Turner.

The first series of sittings began on March 22nd, 1923, at the headquarters of the London Spiritualist Alliance in Queen's Square, W.C.1. Price had brought together a group of sitters which included leading spiritualists as well as prominent members of the SPR. Mrs Eileen Garrett, later to become famous as a medium, publisher, and foundress of the Parapsychology Foundation, attended all but two of the thirteen sittings in this series. It is possible that her presence contributed to the strength of the phenomena observed. At each sitting notes were taken by one of the sitters (usually H. W. Pugh, an SPR member) and these were typed up as the 'Official Report' within two hours of the conclusion of the sitting. The Report was then circulated to each of the sitters for his or her signature and comments. The phenomena recorded during this series were most striking, and included raps, messages, flashes of light, levitations of tables and other objects, the violent smashing of furniture and even—on one occasion—an apparent precognition. The series set new standards by the degree of care taken in recording and the introduction of ingenious pieces of equipment such as the 'Pugh Table', the 'Shadow Apparatus' and Price's 'Telekinetoscope'. With the latter device the experimenters were able to demonstrate what appeared to be a PK effect on an electrical contact enclosed within a soap bubble.

Although some SPR members participated in these experiments, others held aloof because of the strained relationship which then existed between the SPR and the spiritualist organisations. Dingwall, in particular, felt that Price should have left the testing of Stella to the SPR rather than conduct his own experiments under the auspices of a spiritualist body (Hall, 1978, p.10; Tabori,

¹ There is a rough draft of part of Peter Bond's work in the Harry Price Library. As far as I can see, it contains nothing of relevance to this paper.

1974, p.139). In an attempt to placate these critics, Price agreed, after the tenth sitting on June 21st, that further sittings would be held in the SPR's rooms in Tavistock Square. Two such sittings were held, but then Stella wrote to Price informing him that she had decided to give them up altogether, as she had just become engaged to be married. As Turner suggests, it is likely that her fiancé took exception to what he would see as "messaging about with cranks".

Three years later Stella, though still engaged, embarked upon the second series of sittings. Her change of heart seems to have come about largely through the persuasive efforts of Miss Mercy Phillimore, General Secretary of the London Spiritualist Alliance, who had been a regular attender throughout the first series. This time the sittings took place in Price's newly-opened National Laboratory of Psychical Research on the top floor of 16 Queensberry Place. There were over twenty sittings in all, but the records of some of them are missing or incomplete. Over sixty people attended one or more of these séances, the most regular being Mr E. W. Jansen, Col. W. W. Hardwick, Dr A. L. Urquhart, Mrs Lillian Pratt and, of course, Harry Price. Records were kept by Miss Lucy Kay, Price's newly-appointed secretary, who gave a minute-by-minute description of events into a dictaphone. The dictaphonic records were subsequently transcribed onto printed forms. The phenomena were similar to those which occurred during the first series, but much less violent. The series came to an end on April 26th, 1927, after which Stella seems to have given no séances of any kind for about a year.

The third and final series ran from April 13th until July 4th, 1928, and consisted of nine séances. Lord Charles Hope was the instigator of this series, and the sitters included such distinguished personages as Dr Julian Huxley (future Secretary General of UNESCO), Professor E. N. da C. Andrade of Imperial College, Dr E. B. Strauss of St. Bartholomew's Hospital and Dr Robin Tillyard, chief entomologist to the Government of Australia and a staunch supporter of Price and of psychical research (cf. Tillyard, 1926). Surprisingly, Price was absent from all but three of the sittings, and at one of these he left early in order to catch a train. Hope commented that "Mr. Price . . . found it impossible to attend on every occasion and so, unfortunately, missed two of the best sittings" (Hope, 1928, p.65).²

THE PRESENT STUDY

At the time of the Stella sittings the use of statistical methods was in its infancy. I decided to explore the possibility of applying such methods to the existing records in the hope of discovering some unnoticed trends, or at least confirming some of the qualitative impressions given by Price. Any such findings would, of course, be *post hoc*, but they might provide some useful clues for future research. I planned to work initially with Series I, since this was the most fully described of the three series. Any interesting findings could then be confirmed by reference to Series II and Series III.

² Is it too fanciful to discern here the beginning of that quarrel between Price and Lord Charles which was to prove so disastrous during the later sittings with Rudi Schneider? Price certainly disliked what he regarded as Hope's 'bossiness' and it could not have been pleasant to be told, in his own *Journal*, that he had missed some of the best phenomena in his own laboratory! (cf. Gregory, 1985, p. 261, *passim*).

My first step was to assign an *activity index* to each of the thirteen sittings which constituted Series I. This was intended to give a rough estimate of the amount of mechanical energy expended during each séance. Bearing in mind the fact that it requires more energy to smash a piece of wood than it does to make raps upon it, and more energy to raise an object vertically than it does to move it horizontally, I devised the ordinal scale shown in Table 1.

Table 1
Scale Used for Assigning Activity Indices

Phenomena Observed	Activity Index
Breaking of furniture	5
Very violent movement of tables, etc., but no actual damage	4
Levitations of tables & other objects	3
Lateral movement of tables, etc.	2
Raps and vibrations, but no discernible movement	1
No paranormal phenomena observed	0

The activity indices were assigned after reading carefully through the reports of each sitting. They were then put away in a drawer and not looked at for several weeks. The procedure was then repeated without referring to the original assessments. When compared, the two listings proved to be identical except in the case of the first sitting, which was given an index of 3 on the first reading and 4 on the second. It was decided to assign an index of 3.5 to this sitting.

Table 3 lists all the sittings of Series I, their activity indices, the falls in temperature recorded by Price, the presence or absence of luminosity phenomena (flashes of light, etc) and the numbers of sitters of each sex.

STATISTICAL PROCEDURES

1. *The Decline Effect*

Visual examination suggests a decline in activity throughout Series I, and this is confirmed by statistical computation. The mean activity index is 2.5; dividing the data at the mean, we have:—

Table 2
The Decline Effect

	Above mean	Below mean
Sittings 1–6	5	1
Sittings 8–13	0	6

Fisher's exact probability test (Siegal, 1956, p.96) gives $p = 0.0076$; we are therefore justified in claiming that the decline effect in this series is a real phenomenon. However, when the same procedure is applied to Series II no

such decline is found: the above-mean and below-mean figures are almost identical. This suggests that by the time Stella came to take part in the second series her ability had fallen to a low, but stable, level, at which it remained throughout the series. As I remarked earlier, the presence of Mrs Garrett may have had a reinforcing effect during Series I. The mean activity index for Series II is 1.68, and a *t*-test for the difference in means between Series I and Series II gives $t = 2.11$, $df = 30$, $p = 0.043$.

Series III consisted of only nine sittings and shows no sign of a decline effect. On the contrary, there is an increase in activity from the first to the second half of the series (Fisher's test gives $p = 0.04$). This may be because the last four sittings of this series were held in the home of Mrs Herbert Baggallay instead of the séance room of the National Laboratory, thus providing a more congenial atmosphere for Stella.

Table 3

Raw Data Used for Statistical Work on Series I

Sitting No.	Activity Index	Fall in temp (°F)	Luminous Effects?	Number of Sitters		
				Male	Female	Total
1	3.5	11.0	yes	3	4	7
2	3	11.5	no	2	4	6
3	5	7.5	no	3	4	7
4	2	4.0	yes	3	4	7
5	4	20.5	yes	4	4	8
6	3	0.0	yes	5	4	9
7	2	1.5	yes	4	4	8
8	2	0.5	yes	5	4	9
9	2	1.0	yes	5	4	9
10	2	0.75	yes	8	4	12
11	1	1.0	yes	5	4	9
12	1	0.0	no	5	2	7
13	2	0.5	yes	2	4	6

2. Luminosity Effects

At Stella's very first sitting Mrs Garrett declared that she saw "a column of pale phosphorescent light" behind the medium's shoulder. In most of the later sittings of the first series one or more of the sitters said that they saw luminous phenomena of one kind or another. These were variously described as pencils of blue light, or blue or yellow 'electric' flashes. Similar phenomena have been seen with many other mediums, including Home, Stainton Moses, Palladino and Maria Silbert. An in-depth review of such cases, including those occurring in the lives of saints, mystics, and persons on the verge of death, has been provided by Alvarado (1987).

It is of some interest to determine whether or not there is any connection between the occurrence of purely telekinetic phenomena and the various lights

and flashes seen during some of the séances. As there were only three occasions during Series I when such lights were not seen, I decided to pool the data from all three Series and compare the activity indices of séances in which lights were seen with those in which no lights were seen. In all, there were 22 séances with lights, and 20 without. The mean activity indices were 2.238 and 1.523 respectively. A *t*-test of the difference gives $t = 1.91$, $df = 40$, $p = 0.06$, which just fails to reach the conventional level of significance. Lights do seem to occur more often in séances where the telekinetic phenomena are strong, but this could simply be an artefact of the overall decline effect.

3. *Thermal Effects*

From the earliest days of spiritualism, sitters have reported apparent falls in temperature during séances. Crookes mentions phenomena being preceded by "a peculiar cold air, sometimes amounting to a decided wind" (Medhurst et al., 1972, p. 112). However, Harry Price seems to have been the first person to attempt the systematic recording of such changes. For the first Stella series he used a Negretti & Zambra self-registering thermometer which was installed high up on an oak beam on the wall farthest away from the medium. At a later date when he had acquired his own laboratory, he instructed the same firm to make for him a sensitive transmitting thermograph, capable of recording temperature changes to an accuracy of 0.01° Fahrenheit. The instrument had a three-hour drum driven by a clockwork motor, and could thus provide a continuous record of all the temperature changes occurring throughout a long drawn-out séance. It was used in some of the later sittings with Stella and, more extensively, in the 1929 sittings with Rudi Schneider. In retrospect, however, Price seems to have had doubts about the usefulness of such recordings:—

These records were not very satisfactory, as it was impossible to control the temperature outside the room, or the body temperature of the sitters. The same positive results in a properly constructed thermal or isolation chamber would be required to make these experiments convincing. [Price, 1939, p. 34]

Nevertheless, it is possible to extract some useful information from the data of Series I, which was the most systematically reported of the three series. As a rough approximation the amount of energy being extracted from the air in the séance room will be proportional to the maximum fall in temperature, which is given in the third column of Table 3. There is a very marked correlation between the figures in this column and the activity indices listed in column 2 ($r = +0.694$, $df = 11$, $p = 0.0085$). However, to make doubly sure and to avoid possible problems of non-normality, I arranged the data of both columns in rank order and computed the Spearman Rank Correlation Coefficient (Siegal, 1956, p. 202), which gave $r_s = 0.614$, $df = 11$, $p = 0.026$. It is reasonable to conclude, therefore, that the relationship between fall in temperature and psychokinetic activity is a real one.

4. *Balance of the Sexes*

Price remarks "It may be worthy of note that those sittings in which the more violent physical movements took place are those in which the masculine and feminine elements are either in balance numerically, or where the feminine is dominant in number" (Price, 1925). This remark was made only in

reference to Series I but, to my surprise, I found evidence of its truth in all three series. I computed separately for each series a *t*-value for the difference in the means of the activity indices between sittings in which men predominated as sitters and sittings in which women predominated or the numbers were equal. As can be seen from Table 4, each series gave an independently significant result, and the *p*-value for all three series combined was 0.00023. A non-parametric test (counting the numbers above and below the mean and applying the chi-squared test to the resulting contingency table) gave $p = 0.0014$. There was a tendency for more men to be present during the later sittings of Series I, so it is possible that in this series the effect was contaminated by the overall decline effect. However, there were no such declines in Series II and Series III and these Series gave independently significant results when tested for the balance-of-the-sexes effect.

Table 4

Mean Activity Indices Showing Effect of Varying Sex Ratios

	Males predominant	Females predominant	t diff	df	p
Series I	1.833 (n = 6)	3.071 (n = 7)	2.22	11	0.048
Series II	1.200 (n = 10)	2.125 (n = 8)	2.17	16	0.046
Series III	0.900 (n = 5)	2.333 (n = 3)	3.52	6	0.013
Combined	1.309 (n = 21)	2.528 (n = 18)	4.08	37	0.00023

CONCLUSIONS

Compared with other physical mediums, Stella Cranshaw seems to have been rather neglected in the literature of psychical research. Her phenomena were at least as remarkable as those of Palladino, about whom a vast amount has been written. Over a period of five years Stella gave about fifty sittings, and at least seventy people were able to observe the phenomena at various times. Unlike Palladino, she was never caught in fraud, or even accused of it (as far as I know), and all her sitters seem to have been convinced of the genuineness of what they saw. By all accounts Stella was a gentle person, not at all temperamental and quite undemanding regarding the conditions under which she sat. She was not a spiritualist and had no previous experience of séances except for a single occasion when, at the age of eleven, she was removed from a séance for a fit of giggling. She was not particularly interested in the phenomena she produced, and several times had to be persuaded to recommence the sittings after she had broken them off. She was paid only a modest fee for her services.

The comparative neglect of Stella in the literature is probably due to her association with Harry Price, whose post-mortem reputation is that of a cheat

and a liar. I have discussed this matter elsewhere (Randall, 2000) and come to the conclusion that the case against Price has been grossly overstated; nevertheless, the fraud hypothesis cannot be ignored in any consideration of putatively paranormal phenomena.³ One thing is certain: Price acting alone could not have faked the Stella C. phenomena, for they occurred at séances when he was not present. Nor is there any possibility of the use of a regular confederate: completely different persons were present at sittings in which brilliant phenomena occurred. In particular, strong telekinetic phenomena were observed at a séance held on July 2nd, 1926, behind locked doors, with only Dr Tillyard and his wife present as sitters. We may conclude, therefore, that unless there was a gigantic conspiracy involving many sitters from different walks of life, the only person who could have cheated would have been the medium herself. Yet the records show that Stella generally went into a trance state and collapsed into the arms of one of the controllers (usually a hospital nurse) where she remained passive throughout the sitting. The phenomena took place not in total darkness but in the light of a 60-watt red bulb or, in a few instances, in the light of Price's 'shadow apparatus'. On no occasion were any suspicious movements of Stella's body noted by any of the numerous sitters.

Taking the phenomena as genuine, therefore, we can make some useful deductions. The significant relationship between the fall in the temperature of the air in the séance-room and the violence of the phenomena experienced suggests that kinetic energy is somehow being diverted from the air molecules. Robertson (1945) calculated that the energy released from the cooling of one cubic foot of air at STP through one degree Fahrenheit would be sufficient to raise a 15-lb object through a vertical distance of one foot. More recently, Plesch (1999) calculated that three cubic metres of air cooled by only 10°C would release enough energy to project an 80-kg object at 100 metres per second. These calculations show that there is more than enough energy in the atmosphere to account for all poltergeist and séance-room phenomena. What they do not show is how this redistribution of energy takes place, apparently in defiance of the Second Law of Thermodynamics.

Further clues may come from the discovery, consistent across all three series of experiments, that the strength of Stella's phenomena depended upon the balance of the sexes among the sitters. This suggests that PK may be some sort of interpersonal field effect rather than the property of any one person. Spiritualists have long contended that the presence of one or two sitters with 'bad vibes' can inhibit the phenomena of even the most powerful mediums. The Stella results suggest that sexuality may play an important part in determining the strength of such interference effects. The possible relationship between sex and psi is one which, for obvious reasons, has been little explored. In 1938 the psychoanalyst Nandor Fodor was deprived of his post as director of research to the International Institute for Psychological Research because of his sexual theories

³ I know of only two *specific* allegations of fraud in connection with Price's psychic work. The first (at Borley) relies entirely on the uncorroborated word of a newspaper reporter, given 20 years after the event. It is contraindicated by contemporary documents and by the evidence of Price's own secretary. The second concerns the alleged faking of a photograph which has been pronounced genuine by at least one expert.

(Fodor, 1966; see the Foreword by Leslie Shepard). Now that we live in a less prudish age, it may be worthwhile looking again at such matters. A good starting point would be the excellent and comprehensive review by Michael McBeath (1985).

As has been pointed out by Mulacz (1999), the archives of psychical research contain many carefully-written reports which might yield valuable information if they were subjected to analysis by modern techniques. It is often difficult to gain access to such reports, and many present-day parapsychologists have little knowledge of them. On the few occasions when they have been discussed, it has usually been solely in connection with the fraud hypothesis: did she cheat, or didn't she? I hope that the present paper will encourage others to study these records with a view to investigating what they can tell us about the *modus operandi* of psi. The clues that emerge may help the modern parapsychologist to formulate suitable hypotheses for laboratory testing.

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REFERENCES

- Alvarado, C. S. (1987) Observations of luminous phenomena around the human body: a review. *JSPR* 54, 38-60.
- Fodor, N. (1966) *Encyclopaedia of Psychic Science*. New York: University Books.
- Gregory, A. (1973) Review of Turner (1973). *JSPR* 47, 265-267.
- Gregory, A. (1985) *The Strange Case of Rudi Schneider*. Metuchen, NJ & London: Scarecrow Press.
- Hall, T. H. (1978) *Search for Harry Price*. London: Duckworth.
- Hope, Lord Charles (1928) Some sittings with Stella C. *British Journal of Psychical Research* 2, 65-78.
- McBeath, M. K. (1985) Psi and sexuality. *JSPR* 53, 65-77.
- Medhurst, R. G., Goldney, K. M. and Barrington, M. R. (eds.) (1972) *Crookes and the Spirit World*. London: Souvenir Press.
- Mulacz, P. (1999) Eleonore Zugun: the re-evaluation of a historic RSPK case. *JP* 63, 15-45.
- Plesch, P. H. (1999) A thermodynamic approach to some paranormal phenomena. *JSPR* 63, 217-219.
- Price, H. (1925) *Stella C.: An Account of Some Original Experiments in Psychical Research*. London: Hurst & Blackett.
- Price, H. (1939) *Fifty Years of Psychical Research*. London: Longman, Green & Co.
- Price, H. (1942) *Search for Truth: My Life for Psychical Research*. London: Collins.
- Price, H. (1945) *Poltergeist over England*. London: Country Life.
- Randall, J. L. (2000) Harry Price: the case for the defence. *JSPR* 64, 159-176.
- Robertson, A. J. B. (1945) The poltergeist problem: a physical view. In Price (1945), 378-381.
- Siegel, S. (1956) *Nonparametric Statistics for the Behavioural Sciences*. International Student Edition. Japan: McGraw-Hill.
- Tabori, P. (1968) *Companions of the Unseen*. London: H. A. Humphrey.
- Tabori, P. (1974) *Harry Price: The Biography of a Ghost-Hunter*. London: Sphere Books.
- Tillyard, R. J. (1926) Science and psychical research. *Nature* 118, 147-149.
- Turner, J. (ed.) (1973) *Stella C.: An Account of Some Original Experiments in Psychical Research*. London: Souvenir Press.