

PARAPSYCHOLOGY IN ARGENTINA

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When the Parapsychology Foundation asked us to write a report about both our work in parapsychology, and the development of parapsychology in our geographical area for this Conference, we felt it was a great responsibility. And we felt so because the request forced us—in a way—to undertake an evaluation and interpretation of other Argentine investigators' work. This was not easy to do, because the methodology we propose for parapsychological studies has not been accepted by other Argentine investigators. They are not present at this Conference and thus will not be able to explain their own points of view on the subject.

To outline the process through which parapsychology as a discipline achieved university status in Argentina, somehow means to tell about the struggles that took place between different methodological tendencies. We say "methodological" tendencies, not "ideological." Though the ideology on which certain hypotheses are based sometimes can influence the methodology with which such hypotheses are justified, when the scientist has to evaluate that justification, methodology, not ideology, is relevant to him and in the Declaration of Principles of the Argentine Institute of Parapsychology we stated our purpose as follows: to subject every hypothesis to a strict scientific examination, so that only those that have withstood the most stringent tests remain.

This methodological principle always prevailed in our own investigations, as well as in our attitude toward others' work and in our classes of parapsychology at the Rosario University (formerly University of the Litoral). We think that this, together with our careful selection of foreign works on the subject (which were translated into Spanish and put out by important publishers in our country), contributed to the fact that parapsychology achieved acceptance and respect on the university campus. But we have not always been understood by other workers in the vineyard. Spiritualists, who for several decades have been actively interested in promoting their own spirit-

ualistic ideas through parapsychology, called our attitude "materialistic" and tried to impede its spread among those who studied the subject. This methodology was also rejected by other colleagues who were not spiritualists, but who carried on their research along a non-critical, qualitative line (the one "metapsychists" applied to those "consulting sessions" with mediums, psychometrists and clairvoyants that prevailed in parapsychology up to the thirties). Our attitude, instead, was the one we observed in modern parapsychologists. It led us to investigate with a quantitative methodology and critical caution, attributes that characterize modern work in parapsychology. For our colleagues, though, this methodology was "quantitativist" and too restrictive. They prefer the qualitative methodology we have already referred to. Perhaps they did not realize that, though their methodology was valuable at certain steps of the investigation, it also had its clear limits. It was useful only for the initial steps, those taken to explore the ground and to bring forth ideas for the formation of hypotheses. But when it was a matter not of formulating hypotheses but of verifying them scientifically, the only methodology which could satisfy strictly scientific requirements was the one we used.

But it is no wonder that scientific methodology in psychology was resisted in our country. In fact, psychology itself had to face resistance. Today it is known that there is no possible science without scientific raw data, and that scientific raw data are empirical (i.e., relative to an observable fact) and have been obtained under such conditions that they can be interpreted without any ambiguity (or at least with a very small margin of ambiguity). It is also known that with raw scientific data there must be good control of "strange variables," for if these variables were not controlled, it would be possible to give data a different interpretation from that proposed in the hypothesis and which it is intended to confirm or deny. Finally, it is also known that only one technique, statistical experimental design, can control strange variables when, because they are elusive or unknown, these cannot be controlled through manipulation as is usual in physical experiments. Without statistical methodology many branches of modern science could not have achieved their present development. It is particularly necessary in psychology, as many of its objects of study are not observable and cannot be controlled by manipulation. Without statistical methodology it would have been impossible in parapsychology to verify scientifically certain hypotheses, such as ESP or PK, which had become plausible through metapsychists' investigations, but had not attained scientific confirmation. In the fifties, when we became interested in statistical techniques because we realized how

important they were in parapsychology, they were almost unknown among our psychologists. In our country, investigators did not have enough methodological knowledge to carry out scientific psychological investigations.

There were a few exceptions, such as Dr. Horacio Rimoldi, who tried to instigate the application of statistical techniques to psychological investigations at the Laboratory of Experimental Psychology at the University of Cuyo, in the forties. However, his followers were very few. One of them is Professor Nuria Cortada, at present professor of Psychostatistics at the University of Buenos Aires. As have many other worthy scientists, Dr. Rimoldi had to go to other countries in search of an adequate field. He emigrated to the United States, where, after his work at the University of Chicago, he became an experimental psychologist of international fame. Thus it is possible to understand why critical quantitative methodology, which is characteristic of modern parapsychology, was not widely known in our country. Its development in parapsychology among us was a kind of outpost of scientific methodology in psychological studies, as our psychologists did not have a clear notion of its importance. The teaching of psychology was almost exclusively philosophical or clinical. Even today our psychologists are not taught how to investigate, and it is within this context of psychology in our country that the way parapsychology developed is particularly meaningful. Once again, to outline the development of parapsychology in our country we have to outline the methodological struggles between different groups, as well as the investigations that were frustrated for lack of an adequate methodology.

We shall now take a quick look at this development during the last four decades. We believe that in this way we will be able to present a panorama of the present state of parapsychology in Argentina and of its possibilities in the future.

THE THIRTIES: METAPSYCHICS AND SPIRITUALISM

The first attempts to introduce parapsychological studies in the Argentine university took place about the time that the Laboratory of Parapsychology of Duke University was established in the United States. In fact, on November 24, 1931 the first Institute of Psychology was created in the University of Buenos Aires. The Institute was part of the Faculty of Philosophy and Letters. The Institute was to carry out investigations in different areas, such as general psychology, psychological pathology, psychometry and psychotechniques. To each of

these was assigned a special section of the Institute. One of these sections was in paranormal psychology; this was the name by which parapsychology was known by then.

Parapsychology in Argentina appears then joined to psychology within the state university from the beginning, which is easy to understand. In our country there were not such ideological struggles as there were in other countries where psychologists were divided into opposing schools. Psychology was then open to all theories. On the other hand, Dr. Enrique Mouchet, who was Head of the Institute of Psychology, knew the works of such metapsychists as Osty and Richet. He had attended sessions of some clairvoyants who were well-known in Argentina, such as Miss Ilma Maggi, and séances with spiritualist mediums, and he had come to the conclusion that it was necessary to start scientific investigations in this field. For this reason he included paranormal psychology in the syllabus of the Institute, and included these studies in the course of psychology he was teaching at the Faculty of Philosophy and Letters.

Dr. Mouchet was not the only Argentine scientist who promoted parapsychological investigations in the thirties. There are others worth mentioning.

1. On August 12, 1932, Dr. Fernando Gorriti, a psychiatrist, who was Vice-director of the Institute for the Insane, gave a lecture on "metapsychic forces" in the Popular Institute of Lectures, which was owned by the newspaper *La Prensa*. The lecturer was introduced by Dr. Gregorio Aráoz, one of the important personalities in Argentine medicine, who pointed out the need for "confirming the existence of 'metapsychic events,' and, if the results were positive, of seeking an explanation of them."

2. On April 7, 1932 Professor Dr. Gonzalez Bosch, who was Chief Director of the Hospicio de las Mercedes and taught psychiatry to a whole generation of Argentines, carried out some tests of ESP with a well-known psychometrist of Cordoba, Enrique Marchesini. These tests were attended by several professors of the Faculty of Medicine.

3. On April 25, and June 28, 1932, Dr. Efron, an outstanding psychiatrist, gave lectures on "distance communication" by a cross-correspondence technique, and on telekinesis, in which he reported his personal observations during a trip across Europe, where he had got in touch with Dr. Osty, of the International Metapsychic Institute of Paris. These lectures were also given at the Hospicio de las Mercedes and were attended by outstanding personalities of Argentine science.

4. On October 26 and 30, 1933, Dr. Eduardo del Ponte, Professor of Biology at the University of Buenos Aires, lectured about parapsycho-

logical subjects which he had included in his syllabus. Experiences of psychometry and clairvoyance were studied with "gifted" Mrs. Ofelia G. de Ricur and Dr. Luis María Ravagnan, who, right after his personal experiences with ESP, became actively interested in psychology and later became Professor of Psychology both at the University of Buenos Aires and at the University of La Plata. These lectures were attended not only by students, but also by authorities and such university professors as Dr. Juan Nielsen, who was then Counselor of the University.

5. Engineer José Fernández, who was Professor of Physics at the Universities of Buenos Aires and La Plata, studied ESP experiences of "gifted" subjects. He also participated in a public debate which took place on July 19, 1935, in the Modern Theatre of Buenos Aires. Among the audience were several well-known parapsychologists as well as critics of parapsychology. Engineer Fernández presented a defense of metapsychics and reported on the works of Crookes, Richet, Osty and others. He also related his own experiences with clairvoyants, among whom was his wife, Amanda Ravagnan de Fernández, sister of the above mentioned Dr. Ravagnan. He accepted the so-called "metapsychic" phenomena as fact and defended a spiritualistic interpretation of them.

As we see, there were then in Argentine very good opportunities for parapsychology to become a recognized branch of psychology and to be investigated at the University. We have mentioned important personalities in the field, such as Añaoz Alfaro, Bosch and Mouchet, who worked at the University and were interested in metapsychics. We have to add the name of Professor Dr. Nerio Rojas, whose interest in this subject led him to attend the sessions Osty presented at the International Metapsychic Institute of Paris.

In September of 1939, Dr. François Moutier, professor at the Faculty of Medicine of Paris, gave a lecture on metapsychic phenomena at the Faculty of Humanities of Buenos Aires. Thus, the works of metapsychists were well known to important Argentine scientists. According to these, metapsychics appeared as a new science neatly separated from occultism and spiritualism, though it had emerged from them. It was because of this division and because metapsychics was separated from occultism, that Argentine scientists began to be receptive to parapsychology. But the Institute which had been created in Argentine in the thirties was to run a very different course from that of Duke University, which had been established by Dr. Rhine in the United States at about the same time. The latter developed and became an active center of modern parapsychology, while the former remained inactive. It failed because it had been premature and because method-

ology had been inadequate. Toward the end of the thirties interest in parapsychology at the Argentine University had almost disappeared. This was not confined to our country, for it reflected a world process concerning this subject. You will all remember the historic lecture Professor William McDougall gave at Clark University in 1926, when after pointing out the fact that parapsychology was not an easy field for investigation, he said that it required the highest degree of scientific spirit and a good training in scientific methods. Metapsychics had failed because its qualitative methods, which were not adequate for dealing with the elusiveness of psi phenomena, had not been able to surmount the obstacle of scientific criticism. ("Moral certainty," which Bergson proposed as a truth criterion, cannot be a scientific criterion). To remove this obstacle it was necessary to consider criticism and to deal with the elusive character of these phenomena with statistical methodology. That is to say: it was necessary to create modern parapsychology, which is based on that critical attitude and on that methodology.

At the beginning of the thirties, while the university kept silent about parapsychology, there were a few active spiritualist groups. They were in search of an adequate methodology. Engineer José Fernández, to whom we have referred, gave great impetus to this movement. In May, 1933, he founded the ATMAN Spiritualist Circle and he attended the meetings of another spiritualist group, the Psyke Circle. These groups met periodically for séances with clairvoyants and mediums. The answers given by the subjects were registered. Judges evaluated these answers and classified them as right, doubtful, or wrong. In fourteen sessions that took place between June 12, 1937 and October 13, 1939 the number of answer items given by the subjects was 1,966, out of which 1,872 were hits, which is 94.99%. By assigning to each "right" answer an a priori probability of $p = 0.5$, engineer Fernández concluded that the significance of the whole result was $P = 10^{-300}$. In 1941 Engineer Fernández reported these experiences in a pamphlet entitled *Clairvoyance and Probability*, which was published by the Sociedad Constancia. Later he reported them in a lecture he gave at the Argentine Scientific Association (September 19, 1941), which was later published as a pamphlet under the title *The Statistical Method Applied to the Study of Cryptesthesia Phenomena*. Engineer Fernández' conclusions could not have been acceptable from a scientific point of view. The sessions from which data had been gathered lacked elementary critical precautions: possible sensory signs were not controlled and blind techniques were not used in the evaluation of answers. Besides,

the estimation of the probability of success for each answer $p = 0.5$ was too arbitrary and the mathematical model which was used to estimate the significance of the whole result ($P = 10^{-300}$), the Gaussian distribution, was not applicable in this case. The model is based on the assumption of the independence of answers, which analyzed data did not satisfy, as many of them originated in the same universe of speech and so were correlated. Nevertheless, Engineer Fernández' works have an important significance within the historical context because they are the first attempt to apply statistical methods to the study of ESP in Argentine. Though controls did not meet the required level in parapsychology, we can find in these works the search for a new methodology. Rhine's works, which were unknown in Argentine thus far, are mentioned in them.

THE FORTIES: METAPSYCHICS AND SPIRITUALISM

During the first years of this decade parapsychological activities were almost paralyzed in Argentine. The war polarized attention and closed all channels of information. But when it was over, activity returned. During the last years of the decade three important events took place with reference to parapsychology: (1) The Medical Association of Metapsychics was created; (2) the Government tried to control spiritualistic practice, which it considered a "social evil"; (3) the Argentine Association of Parapsychology was created; its first members belonged to an important Argentine spiritualistic association. The three events were not independent of one another; we shall consider them in a chronological order.

On October 27, 1946, a group of physicians created the Argentine Medical Association of Metapsychics in the city of Santa Fe. Its chairman was Dr. Orlando Canavesio, a young psychiatrist who had taught psychiatry at the University of Cordoba and who was interested in metapsychics. Dr. Canavesio was preparing his Ph.D. thesis and was particularly interested in obtaining electroencephalographic records of the parapsychologically gifted. In 1942, with the cooperation of two professors of the Faculty of Medicine of Buenos Aires, he obtained the record of a famous clairvoyant, Eric Courtenay Luck, who was known as Mr. Luck. Subsequently, he went on with these experiences and obtained the electroencephalographic record of another gifted psychic Mr. Alfredo Parodi in Rosario (Santa Fe) in 1947. He reported his findings to the First International Conference of Parapsychological Studies in Utrecht, and to the Interregional Meeting of the Associa-

zione Italiana Scientifica di Metapsichica in Bologna, both of which took place in 1953.

In October, 1947, the Argentine Medical Association of Metapsychics issued a publication, the *Revista Médica de Metapsíquica* of which three numbers appeared up to December, 1948. This review published seven of Dr. Canavesio's papers. As far as we know, he was the only member of that Association who investigated parapsychology. Two of his articles: "Historiando la metapsíquica" and "La ciencia metapsíquica parapsicológica" are of general knowledge; a third one, "Metapsíquica, su esquemática y desarrollo" aims at outlining the problems of parapsychological investigation and at delineating the different features to be studied. In "La utilización de la radiestesia por los gobiernos argentinos" Dr. Canavesio reports that the Government of the Province of Santa Fe engaged a radiesthesist of Córdoba, Mr. Armando King, to find water in the town of El Tostado, where lack of water had become a great hardship for its inhabitants. In another paper, "Historia metapsíquica del metagnóstico mister Eric Courtenay Luck," he reports the family history ways of operating and personal characteristics of this well known Argentine clairvoyant. In "Electroencefalografía y metapsíquica" he describes the electroencephalographic record of an Argentine psychometrist, Mr. Alfredo Parodi. These data were presented at the conferences of Utrecht and Bologna. Finally, in "Los desvíos del espiritismo; su solución," Dr. Canavesio explains the meaning of the control of spiritualistic practice imposed at the request of the National Government. Dr. Canavesio developed most of his activity during the forties. Later he worked in the Argentine Institute of Parapsychology, which was founded in 1953, and in 1957 he worked again among physicians and tried to promote new activities in the Medical Association of Metapsychics. This Association, which was located in Santa Fe, became almost inactive when Dr. Canavesio moved to Buenos Aires to take charge of his official functions. But in December, 1957, he was involved in an accident and died.

His last publication was a pamphlet, issued in 1957, entitled *Revista Médica de Parapsicología*, No. 4, in which he published the first part of his work "Electroencefalografía en los estados metapsíquicos." It contains an up-to-date version of those works which had been published in the *Revista Médica de Metapsíquica*, to which we have already referred. It is difficult to do a scientific evaluation of Dr. Canavesio's "Electroencefalografía de los estados metapsíquicos." The only report he published corresponds to the electroencephalographic record of the psychometrist Alfredo Parodi. The record is divided into four

areas, two of which are specially interesting. The first is area A-B, which corresponds to the moment when the subject is about to attain the metapsychic state, with eyes closed and hands crossed on his chest. The second area, B-C, corresponds to the interval during which the subject is in the "metapsychic state," that is to say the state during which the unconscious activity of the subject's ESP reaches the object, apprehends it and elaborates the result which appears in the conscious and is communicated by the subject in subsequent stages. By finger movements the subject indicated when the first image started to appear and the metapsychic state ended. This corresponds to area B-C of the electroencephalographic record. Each record—there are seven of them—corresponds to a test of ESP with free answers.

The report comes to the following conclusions: (1) under state A-B it is possible to observe the alpha rhythm, which corresponds to normal rest, with an average frequency of 12 cycles per second; (2) under metapsychic state B-C the frequency could not be determined exactly, although in some records it is possible to observe that it gets to 11-13 cycles per second. Evident changes in the electric rhythm of the cortex are registered. It becomes irregular, and the voltage decreases by 50 to 70%.

A critical reading of this work shows that there is no evidence that can prove that the decrease of voltage and the irregularity of the rhythm bear any relation to the subject's ESP activity. This lack of evidence results from the fact that the qualitative methodology with which the tests were done does not make it possible to consider the subject's assertion as scientific data. On the other hand, even if we accepted that record B-C really corresponds to a metapsychic state, the experience would not prove that the changes observed in the record had any correlation with the attainment of the alpha state. This was proved by comparing the records of those tests in which the subject succeeded in his ESP activity, with others (of the same subject or of others) in which the subject failed in ESP, in spite of having paid attention to those images which came to his conscious mind. Only the finding of a statistically significant correlation between the changes in electric potential and rhythm of many records in area B-C and the changes (success-failure) in the result of the subject's tests in ESP would have justified affirming that irregularities and decrease of potential were an index of ESP activity.

What is important in these investigations is that Dr. Canavesio not only gave a strong impulse to parapsychological studies in the Argentine, but also that he was involved with Governmental activities related to metapsychics. Though these Governmental activities did not produce

works of scientific value, they are important from a historic point of view, for they helped to make parapsychological studies legitimate.

On January 7, 1948 a decree of the Secretary of Public Health, Dr. Ramón Carrillo, created the Institute of Applied Psychopathology, which depended on the Secretary of Public Health of the State. One of the objectives of the Institute was to develop an "organized struggle against spiritualism," which was then considered a social evil because it was characterized by exploitation and fraud. The decree made it clear that "only those psychological events which enter within the context of a true scientific knowledge" would be studied. Dr. César Rafael Castillo was appointed Honorary Chairman of the Institute. To carry out the above mentioned objective the Institute of Applied Psychopathology formed a "Cabinet of Metapsychic Investigations" of which Dr. Orlando Canavesio was head.

The Cabinet of Metapsychics engaged Mr. Eric Courtenay Luck to carry out experiments. Other persons with relevant ESP aptitudes were Dr. Luis Acquavella, Mrs. Anne Carrel (widow of the renowned biologist Alexis Carrel), Mrs. Valentín A. King, Enrique Marchesini and Federico Poletti. During his work with the Cabinet, Dr. Canavesio made electroencephalographic records, but no parapsychological investigations of scientific value emerged. This was because their work lacked an adequate methodology, for they had used the qualitative approach that was typical of metapsychists.

The creation of the Cabinet of Metapsychics had an unexpected consequence which was important for parapsychology. The control of spiritualism which this institution developed caused unjustified restlessness among Argentine spiritualist associations, which believed that it was a menace to them. Under these circumstances, spiritualists turned to parapsychology in search of scientific support.

In 1949 the Argentine Association of Parapsychology was created. It brought Argentine professionals together, among whom there were many active spiritualists. Engineer José S. Fernández and kinesiologist Luis Di Cristóforo Postiglioni, who were the first vice-president and the general secretary of the A.A.P., were also members of the spiritualistic Association Constancia and of other spiritualistic associations. One of the objectives of the A.A.P. was to "establish guide lines for examining metagnomic subjects or mediums and to create an office for certifying qualified people, under the control or sponsorship of the authorities involved," which aimed at imposing some control on spiritualism. Another of the objectives—and this was very important for parapsychology—was "to study and investigate parapsychological phenomena . . . with emphasis on the development of statistical methods."

It was the first time in Argentina that an institution favored the application of statistical methods in a psychological area.

During its first two years of life, the A.A.P. mainly devoted itself to publishing activities. In 1949 it began to publish the *Bulletin of the Argentine Association of Parapsychology*, which issued only five numbers, the last one appearing in 1952. At the close of the forties the A.A.P. held a meeting at the Auditorium Birabén, which was attended by Dr. Carlos Ignacio Rivas, University Sub-Secretary of the State, representing the Minister of Education, Dr. Oscar Ivanissevich. During this meeting Eng. Fernández reported on statistical methods applied to parapsychology at Dr. Rhine's Laboratory, and kinesiologist Di Cristoforo Postiglioni gave a lecture on "Objective Metapsychics."

THE FIFTIES: TOWARD MODERN PARAPSYCHOLOGY

a) *Investigations*

At the beginning of the decade Eng. Fernández experimented with Zener cards, the subject being his son-in-law, Ronald Warburton. After 2,500 tests of clairvoyance, they obtained 1,209 hits ($CR = 35.45$; $P = 10^{-300}$); with 750 tests in precognition with pre-shuffled cards, they obtained 216 hits ($CR = 6.03$; $P = 10^{-9}$). It was the first time significant results—in this case highly significant—were obtained in Argentina with the Zener cards.

But to arrive at a scientific interpretation of these results was difficult. By then, the members of the A.A.P. already knew the critical controls required for ESP tests. Fernández himself had received from Rhine the book *Extrasensory Perception After Sixty Years*, published in 1940, which he circulated among his friends. But the fact was that from Rhine they took only the mathematic formalism, ignoring its spirit of criticism. The application of the Gaussian model to the analysis of these data could not be called inadequate, as was the case in the investigation we referred to earlier. In both cases a value of $P = 10^{-300}$ was obtained. The analysis proved that there was a cause, different from chance, that determined the subject's hits. But what was that cause? Experimental conditions did not make it possible to affirm with scientific certainty that the cause was ESP, since there was an absolute lack of the most elementary and usual controls. As for the experiment in precognition with the pre-shuffled cards, the report does not say who shuffled the cards or what technique was used, or if at the end of the operation any random cut was done. This was Eng. Fernández' final conclusion: "Precognitive aptitude is thus perfectly proved." A scientist, however, would not have so easily considered this

conclusion to be the only one or even the most likely, according to the empirical data reported.

At the time of Eng. Fernández's first experiments, we became members of the Argentine Association of Psychology. Shortly after we began to take part in these experiments and became members of the Main Council. Eng. Fernández's first studies of the gifted Ronald Warburton were followed by others in which Dr. Canavesio and I took part.

My first work in the A.A.P. took place in the years 1951 and 1952. We reached the conclusion that Warburton was extraordinarily gifted, since he was able to obtain high results with the Zener cards for years. But it was not possible to use his talent for investigations of a scientific value, because difficulties had arisen within the group about the need for systematic studied planned with pre-fixed objectives and experimental controls. On one occasion R.W. guessed twenty-five cards of a new deck we had received, and obtained 22 hits ($CR = 8.5$). We suggested that he wear gloves and repeat the test. He accepted and repeated his performance: 22 hits. Afterwards we urged him to try again, but this time blindfolded, as well as wearing the gloves. To our surprise, his performance was even better under these conditions: 25 hits in 25 tests ($CR = 10$). On these occasions he tried to identify the positions of certain pictures in a deck with a technique which Eng. Fernández had called "penetration clairvoyance," and he obtained a highly significant number of hits. Eng. Fernández reported these tests in a pamphlet, *Experimental Psychology*, which was published in 1953; we reported them in our *Introduction to Parapsychology*, a pamphlet which was published in 1954.

During this decade we carried out three investigations. The first, about which we have reported in the pamphlet *Introduction to Parapsychology*, was done with a well known clairvoyant, Mr. Conrado Castiglioni. In the hall of the Buenos Aires Theatre, at the end of his professional performance, we conducted the "empty chair" test (la "chaise vide"), with four empty chairs which had been previously selected. Castiglioni described the occupants before the chairs were occupied by people from the audience. From 45 computable predictions, he obtained 37 hits; if to each hit we give an a priori probability of $p = 0.5$, we obtain a high significance ($P = 10^{-6}$) for the whole result. In June 1955 we conducted another investigation. We carried out a series of tests with mediums who belonged to different spiritualistic groups. The idea was to determine: (1) if the psychological characteristics of spirit personifications differed from the medium's when in a normal condition, and (2) if it was possible to obtain any evidence that information was due to any form of paranormal knowledge,

through identifying these personifications by tests. We used a battery of parallel forms of Jung's directed association test, which was applied to each medium under normal condition and to every personification the medium expressed while in trance. Several psychologists and professionals, such as Jaime Bernstein, Enrique Butelman and Pedro Rapela, took part in the experiment. Mr. Naun Kreiman, who was a member of the Instituto de Enseñanza Espírita, Director of the review *The Idea* (which was published by the Argentine Spiritualistic Confederation) and a member of the Council of the above mentioned Confederation, was the most active of those who took part. Mr. Kreiman had assumed a critical attitude toward spiritualism, which he later abandoned to become an active investigator in parapsychology. Through his aid we were able to get in touch with some of the spiritualistic centers; his experiment with mediums in trance was very useful to us for the application of tests to "spirits."

Altogether we examined fifteen mediums and we applied forty-two directed association tests, out of which fifteen were applied to mediums in normal condition and twenty-seven to "spirits." The final conclusion was that "spirit" answers differed in no way from those of the medium under normal conditions. As for the aim of finding evidences of paranormal knowledge, the result was negative because the "spirits" refused to give proof of identification.

The three investigations I have mentioned were imperfect from a methodological point of view. We realized this when we got our colleagues together for a critical discussion of this work. The test of the "empty chair," which was similar to that carried out by Osty with Ludwig Kahn and by Tenhaeff with Gerard Croiset, was imperfect. The evaluation of the subject's answers, for example, was not done "blind." On the other hand, the test of statistical significance we used had the same faults we found in Fernández's work in the thirties. As for the investigation with mediums in trance, we did not note the concordance between the "spirits'" answers and the mediums' which should be estimated by independent observers by "blind" methods. Nevertheless, this was the best we could—and knew how to—do at the beginning of the fifties.

In 1957 we started on a more important work, which aimed at controlling ESP through statistical procedures. It was based on what we called the "focusing method," which was later applied by Milan Ryzl in Czechoslovakia, in some of his experiments with Pavel Stepanek. This work was subsequently confirmed by Pratt in the United States. In these experiments the "focusing effect" was found to operate.

The hypothesis on which the "focusing method" was based can be

explained as follows: if the same deck of cards sealed in envelopes is repeatedly presented in ESP tests, and if a certain picture is named in relation to a certain envelope with a frequency that is higher than that expected, then that picture will correspond to the card within the envelope.

To confirm this hypothesis we made an experiment with two decks of Zener cards. Dr. Luis Boschi (who was skeptical about ESP) put one deck of cards (deck 1) in envelopes, in such a way that the envelopes could not be opened without the experimenter's noticing it. I repeated the operation with another deck (deck 2). Both decks looked identical. The aim of the investigation was to reveal the pictures of the 25 cards Boschi had put into the envelopes (deck 1), through analysis of the answers given about each envelope in many runs. Deck 2 was used as a control. We tried with many subjects, without obtaining significant deviations in the frequency of any of the five kinds of answers given by the subjects for the same envelopes. Then Warburton agreed to cooperate with us in the experiment. A few sessions later we noticed that, as we had expected, he associated certain answers with certain envelopes of deck 1. But when we opened the envelopes we discovered that the pictures which had been called more frequently did not correspond to the pictures enclosed in the corresponding envelopes. This association of wrong answers was also found by Ryzl and Pratt. But in our experience, the negative deviation—though it was suggestive—did not reach a level of statistical significance ($P = 0.01$), due to the fact that the sample was small ($N = 25$).

Warburton's intervention had very interesting features. He tried with the two enclosed decks, following his usual technique of identifying certain pictures through the deck (which Fernández called the "penetration" technique) and he obtained highly significant results. As you will remember, the subject sat before two enclosed decks: Deck 1, which had been put in envelopes by Dr. Boschi, and deck 2 which I had put in the envelopes. Though the envelopes looked identical, his hits on deck 2, with the above mentioned technique, had a significance of $P = 10^{-7}$. But with deck 1 the results were as expected. What was peculiar in the results was that with the "concentration" technique R.W. not only could identify the pictures correctly "through" the pile of enclosed and shuffled cards, but he could also distinguish those that had been put in envelopes by Boschi from those that I had put in the envelopes. He could repeat this difference even when we showed him the fifty envelopes, without our knowing which were Boschi's and which were mine.

The decade ended with an investigation of the possible mediation

of ESP in the diagnosis of a well known "chirologist," which was carried out by Di Liscia and which had a negative result.

b) *Associations*

Let me now refer to events which have personal implications and about which it is necessary to speak, for they had important consequences for the development of parapsychology in our country. These events shed light on the characteristics of that development.

Our interest in what we later knew as parapsychology dated from the end of the thirties, when we were interested in spiritualism. At that time we joined the "Spiritualistic Association Lumen," that was formed by a group of scholars, among whom were many associated with the university. The members of the Association were interested in science and philosophy, rather than in spiritualistic religion. They believed that it was possible to prove spirit survival scientifically, and that on the basis of this fact a new humanism could be built, based on science rather than on religion. This group had broken away from Argentine spiritualism, which drew inspiration from Alan Kardec. The "mediumistic" practices carried out in Lumen tended toward the development of mediums as subjects for studies and experiments under scientific control. They believed that they relied on the aid of a "spiritual direction," which came from the "spirits" of sages who had pursued the same goal during their lives (they believed that the spiritual director of their sessions was Gustave Geley).

But their ideals were higher than their spirit of criticism. On December 29, 1941, the Directive Committee of the Association decided to dismiss me for they considered that certain controls we had proposed meant a deviation in its objectives. This circumstance caused me to be skeptical toward metapsychic phenomena (and not only toward their spiritualistic interpretation), and for many years I almost lost my interest in them. For this reason, and because at that time I felt it necessary to join the groups that fought Nazism and Fascism in our country, I dropped the study of parapsychological phenomena for many years.

However, my interest arose once more at the end of the forties, when I was struck by several clairvoyant experiences of my first wife, Elvira, that made me think that there was something to it. I realized that it was necessary for me to revise my skepticism toward parapsychology. Then I got in touch with the Argentine Association of Parapsychology, which was directed by Eng. Fernández. I also got in touch again with the Lumen group, where I found that important changes had taken place, which I had probably influenced through my former activities. In fact, I learned that since December 1942 the members of Lumen had

decided "to separate from spiritualism and to adopt a new name which would define the character of the new association." The new name was "Lumen Association of Psychic Investigations and Philosophical Studies." The chairman, Mr. Benjamín Odell, favored my re-entering the Association, which I did in September 1951. We proposed studies to be carried out according to modern parapsychological patterns, which were accepted. Our first steps in Lumen and in the A.A.P. aimed at coordinating the efforts of all those who were actively interested in parapsychology, and at obtaining the means for accomplishing our projects. Lumen had those means which the A.A.P. lacked. It had a large conference hall and also laboratories for investigations. But it had very few members. Most of the university people were at the A.A.P. During 1952 and 1953 we merged both groups. The Lumen group incorporated the members of the A.A.P., which then dissolved. After the meeting of December 20, 1952, the "Lumen Association of Psychic Investigation and Philosophical Studies" became the present "Argentine Institute of Parapsychology," which adopted new by-laws. The new association was officially recognized on April 22, 1953. And almost immediately, on June 30, 1953 the members of the Argentine Association of Parapsychology became members of the Argentine Institute of Parapsychology. Now it seemed that Argentine scholars of parapsychology were finally gathered in one group.

But soon there were disagreements between those who wanted to keep parapsychology apart from ideological problems and the active group of spiritualists who came from the ex-A.A.P. Some of us disagreed with those who wanted to include in the Board of Honor some persons who had nothing to do with parapsychology. We did not allow lectures on "flying saucers" to be held at the Institute by persons who were not scientifically competent. Neither would we accept for publication papers which had not been previously examined and criticized from a scientific point of view. As a consequence of all this the two groups opposed each other, and as the spiritualists were in the majority, the work at the A.I.P. was guided according to their ideology. Let us see an example: with reference to the problem of survival, we all know that to this day science has not been able to say "yes" or "no" on an empirical basis. Science can only say "we do not know." Many of us held this position, which we expressed in a paper called "La posesión espírita: cuestión cerrada?" In this paper we pointed out that the parapsychological proof of the existence of non-physical entities permits us to affirm logically that survival is possible, but that there are no empirical proofs of this. This matter is still open to investigation. And this position cannot be called "materialistic," for it is not an ideological

position. It is a methodological position. However, in Bulletin No. 1 (August 1955), we can read the following opinion of the A.I.P.: "under the present state of studies, the ideological opinion according to which it is impossible to say 'yes' or 'no' to such an important problem (survival) is not adequate any more. This behavior was fashionable among the metapsychists of the forties, and although then it was admissible, today it is anachronistic. . . . Those who believe so are *shameful dogmatists* who do not want to confess their materialism, thus leaving their dogma in the unconscious which they use for their nominative hypothesis." These pamphletarian epithets give an example of the tendency which prevailed at the A.I.P. If anyone did not consider the "truth" of spiritualism to be scientifically valid, he was called "materialist" (and shameful).

At the end of 1954, as we did not agree with what we considered a lack of scientific seriousness, Mr. Benjamín Odell, Mr. Julio C. Di Liscia and I resigned. We then sponsored the creation of a new group: the Association of Friends of Parapsychology, which started publication of the *Revista Argentina de Parapsicología*, under my direction. The first issue appeared in July, 1955. This was the first review that contributed to the spread, in Spanish, of the spirit, methodology and works of modern parapsychology. Through its pages we made public the activities of the A.I.P. and for this reason we were forced to resign—Odell, Di Liscia and I—on December 13, 1955.

But our words had not been in vain. Others joined us in our criticism, among them the new vice-president of the A.I.P., Dr. Héctor Meson, who also resigned. On December 1, 1955 Eng. Fernández resigned, together with most of the members of the former A.A.P. Dr. Meson, who was appointed temporary chairman of the A.I.P., called an assembly on December 16, 1955. At this assembly I was appointed president, Dr. Meson vice-president and Dr. Di Liscia secretary. Dr. Orlando Canavesio, who had been excluded from high responsibilities in the A.I.P., was appointed a member of the Board. Other members of the Board were important university professors, among whom were Dr. Gino Germani, Head of the Institute of Sociology at the University of Buenos Aires, and Dr. Jaime Bernstein, Head of the Institute of Psychology at the University of the Litoral (today Rosario University). Other members were Professor José M. Feola, who is at present on the faculty of the University of California at Berkeley and Chairman of the California Society for Psychical Study, Inc.; Professor Nuria Cortada, who taught psycho-statistics at the University of Buenos Aires; and Professor Enrique Butelman, who was director of psychology at the University of Buenos Aires. Many of them could not work in

parapsychology, as they were absorbed by their work at the university; however, they helped to give parapsychology university status.

In fact, almost at the same time an important event took place: according to Decree No. 1,755 of January 16, 1956, parapsychology was incorporated in the syllabus of the Faculty of Philosophy, Letters and Educational Sciences of the University of the Litoral, as a course that was compulsory for psychology students. Now parapsychology had achieved the status it deserved for its significance to psychological studies. The program, which included parapsychology as a course, was developed by a group of professors and students.

c) *Publication*

The first stage was over. The second stage to come, as important as the first, was that of publication, which took place in the second half of the decade.

We have already mentioned the *Revista de Parapsicología*, which appeared in 1955. In 1957, we published a paper called "La percepción extrasensorial" in the *Revista de Educación* published by the Ministry of Education of the Province of Buenos Aires. It was the first time a paper on parapsychology was published in a government review. We have to mention our book *En los límites de la psicología (desde el espiritismo hasta la parapsicología)*, Buenos Aires, Periplo, 1954, for it was the first book on this subject ever written in Spanish. Since 1955 editors have been publishing many books on parapsychology. In June, 1955, Paidós—the most important publisher of psychology books in Latin America—started a Library of Parapsychology, under my direction. The series started with *The Reach of the Mind*, by Rhine, which was followed by other works by Rhine, and books by Amadou, Ehrenwald and Tyrrell. Other publishers, such as Ediciones La Isla and Troquel began to put out works by Tocquet and Sudre.

During 1956 many courses and lectures were held. Dr. Miguel Figueroa Roman, who was Head of the Institute of Sociography and Planning at the University of Tucumán, lectured on "Introduction to Parapsychology." Two courses, about parapsychological techniques and about the relationship of parapsychology to psychoanalysis were held at the A.I.P. In addition, eleven lectures about parapsychology in relation to other disciplines, such as philosophy, pathology and sociology, were given by university professors. At the same time the A.I.P. started an annual course of parapsychology, with Dr. Orlando Canavesio as the lecturer until his death in 1957. Afterwards we taught this course. These were the activities within the A.I.P. In 1958 we gave a course on "Tests in Parapsychology" at the University

of the South (Bahía Blanca), which became part of the course "Methodology of Scientific Investigation" in that university. This was the first course on the subject given in a state university. Others were given at such institutions as the Medical Circle of Psychiatrics and Neurosurgery and the American Federation of Clinical Hypnosis. In 1959 we were invited to lecture on parapsychology at the Faculty of Philosophy of the University of the Litoral. Later we learned that the course had been under the surveillance of the academic authorities of that Faculty. It had been a sort of "test" by which they wanted to decide if, from 1961 on, parapsychology would or would not become a course of the fifth year of the curriculum of psychology. It did, and the course was given from that year on.

Before finishing with this outline of the fifties, we have to refer once more to Eng. Fernández. In August, 1957, a spiritualistic group guided by Eng. Fernández started its activities under the name of Argentine College of Psychic Studies. Those who established it declared that the College was a successor to that Spiritualistic Circle of 1933, to which we have already referred. This group issued a bulletin called *Noticia Psi*, in which they reported their experiments. In the two issues of August 1957 and June 1958 they report tests on ESP with Zener cards, in which Dr. Ronald Warburton acted as subject, and also on free callings in which Mrs. María Amanda R. de Fernández acted as subject. The results and the conditions under which the observations were done were similar to those we have referred to, with one exception: the last bulletin reports nine tests on ESP with Warburton as a subject. These tests were done with the "penetration technique" on a deck of Zener cards which were enclosed within their original box—all nine tests were hits. It was the first experience the group did with Warburton without having the faces of the cards exposed, and the result was highly significant.

Eng. Fernández published four pamphlets: *Parapsicología Experimental*, 1953; *Nuevos problemas filosóficos de la parapsicología*, 1954 (this paper was forwarded to the First Argentine Congress of Psychology, which was held in Tucumán); *Fundamentos científico-filosóficos de la supervivencia con reencarnación* (with Kin. Luis Di Cristóforo Postiglioni), 1956; and *Parapsicología y realidad del alma*, 1958 (this was a lecture given at the Institute of High Studies in Montevideo). His last work contained two essays: "Tiempo y precognición" and "La reencarnación," besides some of his former ones. It was published as *Más allá de la cuarta dimensión*, Buenos Aires, Constanca, 1963. Eng. Fernández died on March 14th, 1967, aged 74, when he was preparing

a work on *Elementos de parapsicología* with his son-in-law, Dr. Ronald Warburton. His death was a severe loss for Argentine parapsychology.

*THE SIXTIES: EXPANSION AT THE UNIVERSITY AND
EXPERIMENTS*

a) *Associations*

At the end of the fifties the first stage ended with the creation of the A.I.P., which brought together those men who were interested in modern parapsychology, and the establishment of the first Chair of Parapsychology at the University. During the sixties parapsychology expanded in the universities, and the men of the A.I.P. played an active role in this process. It is necessary to say, however, that our activity at the universities was not confined to parapsychology. Due to our knowledge of statistics and scientific methodology, we were asked to teach methodology to psychology students. This was because the teaching of psychology in our country was influenced principally by philosophical and clinical schools, and ours was one of the few groups that knew and applied methodology in investigation.

In 1961 we were asked to lecture on parapsychology for fourth year students of psychology at the Litoral University. During the course we discovered a serious difficulty. The students lacked a solid methodological background. Their knowledge of the subject was not sufficient, was abstract, and inadequate for the requirements of our course. For this reason we had to include some items of psychological statistics in our syllabus. As the students had been trained almost exclusively in clinical psychology, parapsychology was something strange to them. But then, the authorities of the Faculty decided to provide a scientific background at the beginning of the curriculum. In 1962, we were asked to take charge of a course on psychological statistics, which was taught to first year students. In this course, we included many parapsychological examples. In this way parapsychology ceased to be something "strange" in the curriculum and became another branch of psychology. Besides, the students realized that the methodology parapsychology required was the same as that required by scientific investigation in all the branches of psychology. After this course, the psychologist Mirta Grano, whose interest in parapsychology had led her to psychology, got interested in psychological statistics and in scientific methodology. From 1964 on she took part in the development of parapsychology in Rosario City.

In 1964 I was given the Chair of Psychological Investigation Method-

ology at the University of Buenos Aires. The following year I was appointed Head of the Department of Psychology by the Board of Professors. In that year a committee formed by student, professorial and graduate delegates decided to include parapsychology as a course. For this reason I held a seminar on "Methodology and Techniques in Parapsychological Investigation." Thus, our discipline was also incorporated in psychological studies at the University of Buenos Aires.

Another field of action during the sixties was that of private universities. The process in this field was similar to the process that had taken place at the state universities. As a result of this the teaching of parapsychology was incorporated in the teaching of scientific methodology in psychology. In 1966, Horwitz and Di Liscia were appointed professors of parapsychology at the Argentine Social Museum University, while Kreiman—who had specialized in statistical methodology—and I were appointed professors of psychological statistics. In 1967 the psychologist Ana María Perrotta, who had been our pupil at the Litoral University, was given the Chair of Parapsychology at Kennedy University, a private institution.

In 1961, Dr. Bruno Fantoni joined the A.I.P., and the following year became a member of the Board. From then on he was very active within private universities. He lectured on parapsychology at the Psychological Sciences Private University (Buenos Aires, 1962), at the Argentine Army High School of War (Buenos Aires, 1965), at the High Catholic Seminary (La Plata, 1967) and in other institutions such as the Medical Association of the Alvarez Hospital. Since 1964 he has been in charge of the annual course at the A.I.P., where Horwitz and Di Liscia lecture on more specialized subjects. Dr. Fantoni is also well known in Brazil, where he has given courses and lectures. But his most important activity in parapsychology is the chair he has held since 1963 on the Faculty of Philosophy at the Argentine Catholic University (Buenos Aires). His course there corresponds to the fourth year of Psychology.

b) *Public Information*

Fantoni, Di Liscia and Horwitz held lectures and courses in different institutions, as well as on radio and TV. On some occasions there were ESP tests on TV. In 1966, the psychologist Susana Pensa (a former pupil of Fantoni's at the Catholic University) and I conducted a GESP test on TV, in which TV watchers acted as subjects and sent their answers by mail. This test has not been analyzed as yet, as we lack the means to do so. On the other hand, Mirta Granero gave courses, lectures and speeches on radio and TV in Rosario.

As for publications, the output was rather poor. The A.I.P. had to suspend the publication of the *Revista de Parapsicología*, because it did not have the financial means to continue it. However, Kreiman with the aid of his wife, Mrs. Dora Ivnitzky de Kreiman, published the *Cuadernos de Parapsicología*, of which approximately fifteen issues appeared between December, 1963, and June, 1966.

In addition, a number of papers were published. Two were Fantoni's: "Parapsicología y psicología," in the *Revista Argentina de Psicología* (March 1966); and "El objeto de la parapsicología," in *Revista de Parapsicología* of the A.I.P. (June 1967). As for me, I also published two papers: "Los tests de parapsicología" (which was included as a chapter of a book published by Kapeluz, Buenos Aires, 1961, as *Los tests*, by Béla Székel and others, and which deals with the principal psychological tests), and "Contribución de la parapsicología al conocimiento del hombre" which was published by the *Revista de la Universidad de Buenos Aires* in 1966. It was the second time Argentine universities included parapsychological subjects in their publications. In 1966, some of my pupils at the Rosario University published four of my papers, which were to be used within the University; these papers were: "Experimentos con tests de dibujos," "Problemática especial de los experimentos con respuesta libre y colectivos—técnicas de Pratt-Birge y Greville"; "Experimentos con cartas reloj—técnicas de aproximación al objetivo"; and "Experimentos de PK con escala de posición graduada."

c) Investigations

The decade started with an investigation of the determining factors in injuries suffered in fire-walking ceremonies with which certain groups celebrated Saint John's Day in Argentina. During 1961 and 1962 Di Liscia and Horwitz observed the ceremony, and in 1962 we were able to carry out an experimental reproduction of it, for which we recorded such data as temperature and size of the bed of wood embers, number of steps and time of each passage, etc., and the presence (or absence) of injuries in those who walked barefoot on the fire. The conclusion was that it was not necessary to have recourse to any sort of parapsychological hypothesis to explain the absence of injuries. Though this investigation did not bear any relation to our own line of work, it was interesting for it helped to counteract in many people the superstitious belief these ceremonies were generating. Dr. Boschi and I fire-walked twice across the bed of wood embers, which was almost three meters long. It was really a highly shocking experience.

From 1963 to 1966 Di Liscia carried out several experiments: (1) on ESP at a distance of 2 km.; (2) on "dermo-optic perception"; (3) on PK with subjects who had been classified into two groups: sheep and goats. Results were not significant. In 1965, Di Liscia cooperated in the "Antártida Experiment," to which we shall refer later.

Kreiman engaged in active research. He carried out several exploratory investigations with many subjects, of which we have to mention two, because the problems investigated were very interesting. The aim of the first was to determine if, when ESP was functioning, the subjects were driven to modify their call-habits or patterns. Kreiman had observed that some subjects acquired call-habits: they called certain pictures after certain others, and this call-habit was characteristic of each subject. Then he decided to find out if those subjects maintained the same call-patterns in the ESP series in which they obtained significant deviations, as well as in those in which they obtained the expected results. None of the subjects obtained any result which had individual significance, so that there was no need to analyze their call-patterns. But in one subject it was possible to observe that he seemed to obtain hits with a significant positive deviation when he gave his answer after having "thought" it carefully (and after having chosen it among other answers he also "thought"). These calls were named "intended calls" as opposed to "non-intended calls," which the subject gave spontaneously. Then a new test was carried out with this subject, which consisted of 41 runs with "intended calls" and 9 runs with "non-intended calls." As was expected, the average of hits in the first case was significantly higher ($CR_{diff} = 2.51$; $P = 0.0063$) than in the second. In the second experiment a child—who competed with others—was tested under two conditions: in the first—which was called "spontaneous"—the subject chose the day to do the test and on that day he did as many runs as he wanted; in the second—which was called "compulsory"—the day of the test and the number of runs had been previously fixed. In the "spontaneous" series the result was higher than expected ($CR = 3.10$), while in the "compulsory" series it was as expected.

Mirta Granero continued her research in Rosario. During 1962-1963 she carried out 637 runs with Zener cards, with 36 subjects, and obtained significant results with two of them. Then, with these two subjects, she made two series of tests, at distances of 150 m. and 3 km. Every day, she held a closed deck of Zener cards in her house, and the subject tried to perceive the cards, whenever he felt like it, and afterwards he sent the results to her. With both subjects she obtained highly significant positive deviations. In one case it was $CR = 5.7$ for

37 runs; in the other it was $CR = 3.9$ for 25 runs. The tests were carried out in the last six months of 1963. When she repeated the experience with the same subjects, but at a longer distance, the results were as expected. In 1966 she experimented with a handicapped child, and obtained evidence of psi-missing when the child was competing ($CR = -2.83$). But in 1969 Granero succeeded in finding a gifted subject: a professional from Rosario who had remarkable ESP aptitudes for drawings and other free-call tests. In that year Mirta Granero and I started on an experiment to which I shall refer later. During this decade, besides many informal tests, we carried out five formal investigations which were sponsored by the Psychology Department of the Faculty of Philosophy (Litoral University). The first took place in 1962. Mr. José Martin, of Rosario, who for the past years had been studying an interesting "medium," Mrs. Adela Albertelli, cooperated with us. While in trance, the "medium" produced writings in languages which were absolutely unknown to her, such as English, German, Hebrew, Chinese, and even a strange, almost pictographic writing which the Hungarian Society of Psychic Investigations identified as belonging to a gypsy dialect of the country. Martin had found that the medium's writings usually corresponded to something that had been published in foreign magazines that she could have actually seen. We thought this could be a remarkable case of hypermnnesia and tried to confirm this hypothesis by giving the subject (for controlled, short periods of time) sequences of words in different languages that were unknown to her, and by motivating her to retain these words. We had weekly sessions with the "medium" for several months. Martin and Mirta Granero were present at the sessions. However, we could not induce her to reproduce the same words in trance.

In that year—1962—we planned a re-examination of the data we had obtained in 1956, when we had tested 302 pupils of a primary school with randomized ESP cards enclosed in opaque envelopes, by the "focusing" method. This re-examination aimed at confirming some of Van Busschbach's findings about interpersonal relations (teacher-pupil), and Schmeidler's correlation between attitudes (sheep-goat) and scores. The re-examination could be done because the IBM Trade Corporation collaborated with us in the use of its computers. Through variance analysis, significant differences were found in the sheep-goat scores, which confirmed Schmeidler's results. The paper was published in the *Journal of Parapsychology*, June 1965. It was the first paper written by a Latin American to be published by a foreign review of parapsychology of high scientific level.

In 1964 we carried out an investigation in Rosario with a remark-

able sensitive, Mrs. Ofelia B. de Scheafer, whom José Martin had discovered. We held six sessions of "psychometry" (object-readings) with her, during which we gave her six objects (keys) which had been provided by six persons who were not present at the sessions. The free calls were evaluated—with the cooperation of Jorge Bisbini, of the A. I. P., by the Pratt-Birge method. The analysis of data was done with the Greville method and the result, though suggestive ($P = 0.02$), did not reach the significance level. This was the first time these analysis techniques were applied in Latin America.

In 1965 we carried out an investigation which aimed at verifying if the old guessing technique known as I Ching, of which Jung has spoken favorably, really provided significant information to those consulting it. It was found that such people considered the answers of I Ching as very significant when related to their personal troubles; but when they selected their corresponding answer-items by "blindly" marking them within a set of non-corresponding items, the number of correct choices was as expected.

However, Di Liscia, M. Granero and I carried out our most ambitious investigations in 1965 and 1969. In 1965 it was an investigation of long distance ESP, which was international, for groups of subjects belonging to twenty different countries took part in it. We called it the "Antártida Experiment" because for 64 days Zener cards were exhibited under different conditions at the Station of the Antártida Naval Base, which belongs to the Argentine Navy. The cards were exhibited for 24 hours and had to be perceived by the subjects in their different countries. Approximately 200,000 answers were obtained. But circumstances to which we shall refer later caused the Institute of Calculus of Buenos Aires University, where the data were being processed, to interrupt its work in 1966. Thus the experiment remained unanalyzed. At present work is being done on it at the Computing Center of Santa Fe Province; we expect to receive the results shortly.

As for the experiment of 1969, it consisted of a series of 90 ESP tests by a high scoring subject, on free drawings which were exhibited in a nearby room, under different conditions. Answers were evaluated by the blind method, by judges who worked independently of one another and by rank order method. The analysis of the data, which required non-parametric statistical techniques, was finished in 1971, and the results were very significant. They prove that the subject identified the object-drawings correctly by GESP, as well as under clairvoyance condition, that is to say, without M. Granero seeing them.

Further analysis revealed interesting information on the way the subject's ESP operated.

d) *Two negative facts*

As we have seen, parapsychology had developed in Argentina during the sixties. It had been incorporated as a course in five Argentine universities and for the first time experiments of high level design had been carried out in our country under strict scientific controls. But there were also two negative facts: (1) parapsychology disappeared from State universities; and (2) the number of persons who were actively interested in parapsychology increased very little.

In 1967, after the coup d'Etat with which a group of Army officers took over the political power of the country, parapsychology disappeared from State universities. And this happened at the time the Dean of the Faculty of Philosophy of the Litoral University, Professor Guillermo Maci, had given us a hall for installing a research laboratory, which was to be under the jurisdiction of the Chair of Parapsychology. One of the first acts of the new Government was to take over State universities. When this happened, almost all the professors of all State universities resigned. This answer to the government's decree seemed—at least at that moment—inevitable from a moral point of view. But the effect it produced was not precisely the expected: by resigning, we had intended to prevent some measures, which instead were taken very soon. The takeover of the universities led to a series of measures which resulted in a progressive deterioration of academic and university life. One of these measures was to emend the psychology syllabus arbitrarily and without consulting anybody. Since 1966 the syllabus in psychology has changed—always arbitrarily—every time a new ruler replaced his predecessor, which has been commonplace since 1966. As a consequence, parapsychology was eliminated in State universities.

As for the small increase in the number of persons actively interested in parapsychology, this can be explained as follows: when the A. I. P. was formed in 1953, its approximately 100 members were only passively interested in parapsychology; they limited themselves to "seeing and listening." Only a few of us felt a real active interest, and we spent all of our free time in learning and investigating. At the end of the fifties only four of us remained: Di Liscia, Kreiman, Horwitz and I. We hoped that if we held a series of courses and lectures, the number of followers would increase. But the truth is that in spite of our labor, only two persons have followed us during the whole

decade: Dr. Bruno Fantoni in Buenos Aires and Mirta Granero in Rosario.

Several thousand people attended our courses and lectures during this time, but most of them did not approach parapsychology with a scientific interest. They were spiritualists who came in search of a confirmation of their own beliefs, and who disregarded our approach to parapsychology, for they realized that scientific parapsychology did not confirm their beliefs. However, this scientific approach which discouraged spiritualists, appealed to people with a scientific mind. Many of them, who had expected nonsense from us, changed their minds and attitudes and became convinced of the importance of parapsychological studies. But they could not start investigating, because this field did not offer good monetary possibilities.

At the university, some of the students who had to take parapsychology, as was required by their syllabus, were really only interested in clinical psychology, or in educational psychology, or in industrial psychology, which offered them better opportunities for professional work. But none got interested in parapsychology, which did not offer such possibilities. The study of parapsychology did not even offer the possibility of becoming a "professional investigator," as this career did not exist on the faculty. (The fact is that we had introduced it into the program when we were head of the department of psychology in 1966, but this did not last, due to government takeover.) Thus, only very few could be actively interested in such a specialized field, which demanded study and effort without giving much in return.

e) *The seventies: prospects*

It seems now that there are a series of favorable conditions which can counteract the facts we have referred to. At the end of 1968 the A.I.P. moved to a new building, in a good location in town. This fact seems to have been important, for during 1969 and 1970 we noticed the influx of new people—most of them young—to the courses Fantoni and Di Liscia held. This year—1971—a group of young people are following courses in parapsychological investigation, with Kreiman and me; some of them were moved by their interest in parapsychology and entered psychology after abandoning other studies. It is the first time that we have been able to observe such an active interest in young people, and this leads us to be optimistic about the future.

In the young students we observed something we had already observed in some of us: it seems that there is a process which takes them from parapsychology to psychology, and not from psychology to para-

psychology. It seems that an active and lasting interest in parapsychology is related to a primary interest in the knowledge of man's inner nature. Parapsychology is, of course, that branch of psychology which proposes the greatest challenge and at the same time the most promising prospect for that knowledge. But it also seems that if that original interest lasts, it soon becomes necessary for knowledge to integrate parapsychology with general psychology. In our country it seems to be this way: parapsychology is one of the leading roads to psychology. During the last two years the interest in parapsychology has increased in Argentina to high levels—higher than ever. This year Mirta Granero and I started a short course at the Faculty of Engineering at Córdoba city; the course was so crowded—more than 800 persons—that it was necessary to move to another place. Father Oscar Gonzalez Quevedo, who is active mainly in Brazil, held short courses in the Argentine cities of Tucumán and Buenos Aires, which were also attended by a large number of people. Father Quevedo intends to fight, through parapsychology, the superstitious beliefs arising from spiritualistic and occult practices.

But this extraordinary interest involves a serious danger: the multiplication of humbugs. For lecturing on parapsychology has become a profitable business for some people, which is the more dangerous because the parapsychologist's activity is not controlled in our country. In these years many "free courses" in parapsychology or in psychometry as well as courses in astrology have become prolific. We had the opportunity of meeting some persons who introduced themselves with a diploma of "parapsychologist" they had received from these "courses." The A.I.P. will have to face this fraud.

Also within the universities this decade seems to offer a promising prospect. In 1970 the new Dean of the Faculty of Philosophy of the Rosario University, Professor Luis Arturo Castellanos, called on us to direct the curriculum of psychology in that Faculty, and to take charge of the Seminar on Parapsychological Investigation Methodology. At that time parapsychology was undergoing a serious crisis in the universities, as a consequence of the last government takeover. There were more than ten vacant chairs, which we filled with carefully selected professors. The psychologist Mirta Granero was appointed to the chair of General Psychology in June 1970.

In 1970 Mirta Granero and I included parapsychological items in our syllabus. She included extrasensory perception and the usual techniques for its investigation and I included examples of parapsychology in my syllabus of Psychological Investigation Methodology. These examples are used to illustrate the operative definition of scientific

concepts and the techniques to verify hypotheses. Thus, these courses were returned to the Rosario University, arousing great interest in the students.

In 1970 I also published two books which demanded many years of preparation: *Methodological Problems and Myths in Psychology and Psychotherapy* (Problemas y mitos metodológicos de la psicología y la psicoterapia) and *Methodological Fallacies and Myths in Psychology* (Falacias y mitos metodológicos de la psicología), which will be used as textbooks by students. In these works I approach the foundations of the different psychological schools, and I point out the differences between scientific schools and branches; at the same time, I develop some items of parapsychology.

However, the future of parapsychology in the university is still uncertain, specially after the last takeover. In fact, the new authorities which were appointed in 1970 after our return to the university, made an important change in 1971: the Department of Psychology, which had been part of the Faculty of Philosophy of Rosario University, was separated from it and turned into a High School of Psychology and Educational Sciences, which is under the jurisdiction of the university. This change, and the appointment of a Delegate as Head of the School, made the position of Director—which I was holding—disappear; so that at present I only keep my Chair.

At present the future remains uncertain. We expect changes of all sorts, but there is no news so far.

Still, it is our firm belief that whatever may happen within Argentine State universities, parapsychology will regain the place it deserves for its significance in the psychological field and for man's knowledge.