PARAPSYCHOLOGY LABORATORY University of Utrecht Varkenmarkt 2 Utrecht 2501 The Netherlands

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# CONTENTS

Information about the Parap sychology  $$\rm p.\ 1$$  Laboratory of the University of Utrecht

Keil, H.H.J. Pavel Stepanek and the focusing effect p.22

Rietdijk, C.W. The function of the paranormal p.40

Parapsychology Laboratory University of Utrecht Varkenmarkt 2 Utrecht 2501 The Netherlands



# INFORMATION ABOUT THE PARAPSYCHOLOGY LABORATORY OF THE UNIVERSITY OF UTRECHT

#### INTRODUCTION

The purpose of the present booklet is to provide information about the Parapsychology Laboratory of the State University of Utrecht. It starts out with a description of our subject matter, parapsychology. Some organizational aspects of the Parapsychology Laboratory are discussed, followed by a brief sketch of the research interests that are pursued in this laboratory and the educational programmes that are offered to students. Then follows a survey of the main parapsychological organizations and research centres and their activities. Finally, some useful information of a more general kind such as adresses of parapsychological centres and journals, directions regarding how to get to the Parapsychology Laboratory etc., is supplied. At the end of this booklet maps are included which might be of use to visitors.

Further information will be provided if requested. It should however be borne in mind, that the time of the staff members whose main emphasis is on research and teaching is limited.

This booklet has been written to meet the requests which we regularly receive for information about parapsychology in general and about the activities of our laboratory. We thought it useful to publish it also in this Research Letter for those readers, who want to get a general impression about this laboratory.

Staff members:

Henk Boerenkamp Martin Johnson Sybo A. Schouten

### PARAPSYCHOLOGY

Parapsychology denotes the scientific study of paranormal or psi phenomena, that is, of phenomena which in one or more respects conflict with known physical laws. There is, however, a great deal of confusion in parapsychology as to which phenomena should be considered as paranormal. In the past, for instance, phenomena such as stigmatization and possession were regarded as belonging to parapsychology and nowadays there are some parapsychologists who devote their time to Kirlian photography, skin vision, or 'psychic photography' to name but a few examples, although it is not at all obvious why these should be considered parapsychological issues.

One of the main reasons for this confusion seems to be the lack of well defined concepts which in our view can be explained by the historical background of parapsychology and the development it took. More than in most other scientific branches, research in parapsychology was initiated out of an interest in the implications of a possible existence of paranormal phenomena, rather than out of an interest in the phenomena themselves. The early researchers - and still many a parapsychologist today - believed that if they succeeded in proving the existence of paranormal phenomena they would also prove that mind, endowed with properties that could not be accounted for by any known physical theory, existed independent of matter. As a result, parapsychology became strongly linked with issues such as spiritual entities, the survival after bodily death etc., and the research aimed mainly at the accumulation of evidence for the existence of psi phenomena. Furthermore, any phenomenon suggesting the - in physical terms - unexplicable operation of one mind on another mind or on matter could be subsumed under parapsychology which became a conglomerate of very diverse phenomena most of which may not have more in common than the fact that they are regarded as belonging to the field of parapsychology.

During the last thirty years or so a different trend in parapsychological research has emerged. More and more researchers who were interested in the phenomena themselves entered the field and consequently, an increasing number of studies were conducted in which it was attempted to isolate variables relevant to the processes underlying paranormal phenomena. In addition, the research centred mainly on the phenomena of extrasensory perception and psychokinesis. Both factors strengthened the experimental character of the research, and today, parapsychology is primarily an experimental science, more interested in the nature of paranormal phenomena than in proving their existence.

It may be useful to define the three forms of extrasensory perception - telepathy, clairvoyance, precognition - and psychokinesis. It should be borne in mind, however, that as long as the underlying processes are not known, any definition can only be based on the distiction between paranormal and non-paranormal phenomena. Psi phenomena are typically regarded as not being mere coincidences and they are, therefore, defined as phenomena indicating a correspondence and a connection between an event or a situation and a human or animal action that cannot be explained by knowledge acquired through the senses. In this definition, the term 'knowledge acquired through the senses' has to be understood in a broad sense insofar as it also includes reasoning or predictions made on the basis of knowledge that was acquired through the senses. A 'connection' is understood as a describable process between the event and the human or animal action. In the case of telepathy, the event or situation concerns the mental action or state of another person, for instance thoughts or emotions. If the event or situation is objectively perceptible, we speak of clairvoyance. In the case of precognition, the event or situation occurs after the human or animal action has taken place. To psychokinesis those cases are attributed in which the human or animal action is responsible for the occurrence of the event.

The difficulty in defining these phenomena has to be seen in the fact that they do not have a set of properties that make them typically paranormal. Hence, the connection - the underlying process - has to be included in the definition. Since at this stage of research this process cannot be demonstrated, it has become necessary to select a criterion as indicator for the presence of the process. But as long as we do not have at our disposal an indicator that is directly related to the underlying process, the choice of the criterion will always remain an arbitrary one. The most widely applied criterion is the probability of the established correspondence. For example, if the subject correctly predicts a number that is generated by a random number generator and if the probability for a correct guess is smaller than 0.01, the subject's action is by definition an act of precognition the moment we apply the criterion stating that the probability of the correspondence should be 0.01 or less. But since we cannot be sure that our criterion actually indicates the presence of the underlying process, we can only assume that such a process has been at work and use the concept of precognition as a working hypothesis.

Owing to the nature of the phenomena under investigation,

parapsychology is interdisciplinary in character and particularly related to experimental and clinical psychology. Many research methods developed in experimental psychology have been applied in parapsychological research. Very often these methods require intensive specialization and the application of sophisticated technical apparatus, and an active cooperation with experts from different areas is of vital importance.

# THE PARAPSYCHOLOGY LABORATORY

#### ORGANIZATION OF THE LABORATORY

The Parapsychology Laboratory is an institute of the State University of Utrecht. Although as early as the eighth century a school was founded in Utrecht, the university as a centre for higher education stems from the 17 th century. At present the University of Utrecht is one of the biggest in The Netherlands and nearly all branches of science are represented in its faculties.

In 1966 the Psychological Laboratory of the Faculty of Social Sciences appointed a staff member, Sybo A. Schouten, in order to promote experimental investigation of paranormal phenomena. In 1974 the Parapsychology Laboratory within the Faculty of Social Sciences was established with the inception of a regular chair and professorship in parapsychology at this university. This chair is held by Martin Johnson. As a third member of the staff a clinical psychologist, Henk Boerenkamp, was appointed. He occupies a parttime position. The laboratory has another position available for foreign research workers whose stay is limited to a maximum of one year. They may carry out an experimental or theoretical study of their own, assuming of course, that the necessary facilities are available in the laboratory.

The Parapsychology Laboratory is housed in the same building as the Psychological Laboratory of the university, and the research facilities of one laboratory are also accessible to members of the other laboratory. In particular, the computer facilities of the computer centre belonging to the Faculty of Social Sciences play an important contributary role in carrying out research.

The task of the laboratory is to carry out experimental research in parapsychology and to provide a variety of educational programmes for Dutch students. Since in our opinion at present parapsychology is still in a stage of development, priority is given to experimental

research. We consider long-term planning of research projects and the development of a variety of experimental facilities for sophisticated research as essential tools for fruitful work. In view of the limited number of staff members we try to standardize a number of educational programmes, especially those concerning introductory courses, by developing video productions providing general information over a range of parapsychological topics.

#### THE RESEARCH PROGRAMME

The investigation of paranormal phenomena in the laboratory is based on the assumption that there are certain unknown processes which are responsible for the occurrence of the phenomena. The goal of the research is to uncover the nature of these processes. Consequently, the research carried out is mainly of an experimental character. Furthermore, the research is limited to the study of the phenomena of telepathy, clairvoyance, precognition and psychokinesis. But even when limiting the research to these phenomena, it is necessary to select certain research topics, since it is impossible to pursue all research approaches currently in use in parapsychology. The choice of research topics depends on the interest of the individual researchers and on the research facilities available, but it should always be within the framework of long-term planning accepted by the laboratory.

The predominantly experimental character of the research implies that most of the studies are carried out in the laboratory. However, to avoid the risk of becoming too isolated within the laboratory, one staff member is in charge of field studies, the investigation of spontaneous cases and of paragnosts, individuals with alleged paranormal abilities.

The research programme can be roughly categorized by the following topics: personality correlates of psi; psychophysiological research; animal research; other research activities.

#### PERSONALITY CORRELATES TO PSI

The notion of a relationship between ESP and subliminal processes is an old one. The controversy about the existence and character of subliminal perception has ceased in recent years and has made way for psychodynamic interpretations. Professor Kragh's Defense Mechanism Test (DMT) has now been in use for more than a decade, both in studies of perception-personality and as a predictor of scoring behaviour in an ESP task. Much of the work going on at our laboratory in the personality field is related to the subliminal technique and to the DMT.

The DMT can be described as a projective test. A tachistoscopic technique is utilized and 'threatening' pictures like those in the Thematic Apperception Test are presented.

The main discovery, based on a number of published studies, seems to be that the DMT is a useful instrument for the prediction of a subject's scoring direction in an ESP task. Subjects manifesting a low level of Perceptual Defense Organization (PDO) in their protocols (thought of as being related to low level of anxiety proneness) tend to score above chance expectancy, whereas other types of PDO in a subject's protocol seem to be related to the psimissing syndrome, that is manifesting below chance scoring. Extensive studies are being carried out to try to find out more about these and a few other suggestive relationships. In this process of analysis computer programmes will be used. Attempts are also being made to collect and analyse DMT data from subjects who, on the one hand, have manifested pronounced psi-ability in a laboratory setting or who, on the other hand, have experienced or performed things in a real-life context which lead them to believe, and others too, that they possess paranormal abilities.

Another line of experimental studies in the subliminal field is related to the so-called Pötzl-effect, a procedure by which an attempt is made to effect a subject's psi-vigilance by means of subliminally exposed stimulus material which in subsequent ESP experiments will be used as one category of target.

# PSYCHOPHYSIOLOGICAL RESEARCH

There are in principle two different ways in which psychophysiological measurements can be applied in the investigation of psi phenomena. In most studies a psi test is carried out, for instance a card guessing task, and then it is investigated whether hits and misses are associated with a specific psychophysiological reaction pattern. Another application is to use a psychophysiological reaction of a percipient as a 'psi response'. Suppose we create sudden emotional arousal in an agent, we can then study to what extent and under what conditions the percipient reacts to this change in the agent by showing a response in his skin conductance pattern, heart rate, etc.. The studies carried out in our laboratory belong mainly to the latter type.

One advantage of such a psi test seems to us to be that the percipient does not have to show overt behaviour - with all its possible distortions of the psi content - before we are able to judge whether psi has played a role. Even unconscious reactions on the part of the percipient are detectable. Moreover, since different psychophysiological measurements are carried out we are able to gain

some insight into the 'state' of the percipient and the agent prior to the onset of successful or unsuccessful trials. On the other hand, research of this type proves to be rather complicated and time-consuming and it also requires rather extensive facilities.

#### ANIMAL RESEARCH

The main reason for carrying out animal studies lies in the potential which is offered by this research for investigating brain processes associated with psi activity. This stage of research has however not been attained yet as before starting with such time and money consuming experiments one should be fairly certain that the subjects will show psi activity during the experiments. Therefore at this point the research is aimed at finding a set of variables that will enhance the psi vigilance, or at finding a heredical effect that will make it possible to breed 'gifted' subjects.

#### STUDIES WITH PARAGNOSTS

The main aim of this study is to give an analysis and a comprehensive description of what takes place in a 'consult', a session in which a paragnost receives a client and describes the characteristics, behaviour or situation either of the client or of a third person in which the client is interested. In general, the paragnost makes his statements with the help of an 'inductor', a photograph or some such possession belonging to the target person.

This study is not primarily aimed at isolating possible paranormal events, but all processes which lead to or have an influence on the statements made by the paragnost are studied. In the analysis much attention is paid to the interactional and informational processes which play a role in the communication between paragnost and 'sitter'.

#### OTHER RESEARCH TOPICS

The above-mentioned topics are part of the long-term planning. However, there is some room left for staff members to pursue their individual interests in other research topics, or to follow up new and promising developments in the field. Especially in the case of foreign research guests who are temporarily appointed to the laboratory, no strict limitations exist regarding the topics which are acceptable. These topics vary from a scientific-philosophical analysis of concepts, methods and strategies applied in

parapsychology to strict experimental research, for instance, the effect of experimenter bias on the scoring of subjects in a psi task.

#### EDUCATIONAL PROGRAMMES

Under the present circumstances parapsychology cannot be studied as an independent subject, but students from other disciplines, usually psychology, have the opportunity to participate in courses or do graduate work on parapsychological topics. In general, the content and form of the teaching programme is determined in cooperation with the requesting parties, that is, the department or division concerned, and the students. As in Holland parapsychology is only taught at the University of Utrecht, students from other Dutch universities can also do some work under the supervision of the laboratory. It is encouraged that different members of the laboratory participate in each teaching activity.

The following study programmes take place on a more or less regular basis.

- Introductory courses in which the students obtain a general impression of the phenomena, research methods and theoretical developments in parapsychology. As we receive requests for this type of course from various interested parties, we are developing standardized material in the form of video productions to satisfy these demands.
- A more methodologically oriented programme in which the students mainly from the psychology department learn to apply certain techniques or procedures. These techniques can be applied generally, but within the context of this programme they concern a parapsychological topic. A typical example would be the construction of a questionnaire regarding attitudes towards parapsychology. Work of this type is carried out by way of an individual or group project. A seminar for graduate or post-graduate students in which selected parapsychological problems are introduced. The emphasis is on methodological problems which are approached from the point of view of the philosophy of science.

In these three study programmes the students receive academic credit for their participation.

If time is available, students from other universities can carry out parts of their study programme in our laboratory, provided they obtain permission from their own university. With these programmes we adhere to the requirements specified by the department which supervises their study and arrange the contents of the programme in deliberation with the student.

There exist possibilities to do thesis work on a parapsychological topic but since the thesis has to be defended within the student's own department, he has to make sure that the department will accept the thesis. In the case of psychology students, there are normally no problems in having the thesis accepted by the Department of Psychology. Defending a thesis to acquire a doctorate is only possible for candidates having a master of science degree.

In the future we hope to be able to offer post-graduate students the possibility of participating in a one-year programme offering specialization in parapsychological research. Parts of the programme will be fulfilled by parapsychologists from other universities.

#### FOREIGN GUEST RESEARCHERS

As mentioned before, foreign guest researchers can be temporarily appointed as staff member at the laboratory to carry out a specific research project. Applicants should have an academic degree and sufficient experience to guarantee successful completion of the project. In general the project should result in one or more publications. Anyone interested in this opportunity should send in an outline of a research proposal, stating the period in which they wish to carry out the research. In view of our planning it is important to notify us at an early date. We prefer research projects which can be carried out using the available facilities (see description below). Foreign guest researchers are paid according to the same criteria which are adopted for all staff members of this university. Travel expenses are not paid by us but have to be provided by the applicant.

#### **FACILITIES**

The laboratory shares a number of facilities with the Psychological Laboratory and the Faculty of Social Sciences. A PDP-11 computer (RSX-11M system) linked to a CYBER computer of the computer centre of the university can be utilized for research purposes. Software is available for running various research projects, while for analysing data a special software packet for psychophysiological data and the SPSS packet can be applied. Although staff members are free to use these facilities, they themselves remain responsible for operating the system and for the development of the software necessary to run their research project.

The construction of apparatus and special devices for experimental research is possible on a limited scale. For special projects the assistance of a laboratory for audio-visual techniques can be

obtained. Apparatus for studies in the subliminal field are also available.

The laboratory is located in the centre of the city of Utrecht. Its accommodation is sufficient, but due to the nature of the building and its location on a street with dense traffic the adequacy of the experimental rooms must be considered as less suitable for some parapsychological experiments. The laboratory shares a library with the Psychological Laboratory. As regards literature in experimental psychology the library is well provided. However, our stock of parapsychological literature is still far from complete.

#### THE EUROPEAN JOURNAL OF PARAPSYCHOLOGY

Twice a year the laboratory publishes the European Journal of Parapsychology. The object of the European Journal of Parapsychology is to stimulate and enhance the interest within this field, especially in our corner of the world, by communicating research results and issues related to professional parapsychology. Although there will be an emphasis on experimental work, theoretical articles are also welcome. Contributions from all over the world will appear in the journal.

A hallmark of the European Journal of Parapsychology is the attempt to avoid selective reporting, that is, the tendency to bury 'negative' results and only to publish studies that 'turn out'. To avoid turning the journal into a graveyard for all 'unsuccessful' studies, we require that the acceptance or rejection of a manuscript should take place prior to the phase when the experimental data are collected. The quality of the design and methodology and the rationale of the study, should be judged as per se more important than the level of significance of the outcome of the study. As a practical rule we advise a contributor of an article to submit a design of his planned study before the study is carried out. The rationale of the study should be stated as well as all the hypotheses related to it. Furthermore one should try to specify the number of subjects, the number of trials, etc., plus the type of statistical methods one plans to use for one's evaluation.

Priority will be given to the publication of studies which fulfil the above-stated publication policy. The final manuscript with presentation of results must reach us two months in advance of the official publication dates, that is, May 1st and November 1st.

The subscription rate is Fl 15, - or \$ 6.- a year.

#### THE RESEARCH LETTER

The laboratory also publishes at irregular intervals Research Letters. The aim of issuing Research Letters is to present information about ongoing research activities in the laboratory or from other research groups, and to provide an opportunity for researchers, who for some reason are not able to publish a manuscript in one of the regular journals, to have their publication printed in the Research Letter. In this way we hope to stimulate research activities as it is often frustrating, especially for younger research workers, when they are not able to communicate reports of their activities because they do not meet the standards required by professional journals. In addition, the Research Letters are a means of communicating deviating or controversial opinions or theories which, although we might not agree with them, merit publication because we feel that some people might be interested in them. Hence, we do not consider ourselves responsible for publications in our Research Letter which are not acknowledged by us and which do not state 'University of Utrecht' under the name of the author.

The Research Letter is sent free to subscribers to the European Journal of Parapsychology and to members of the Parapsychological Association.

#### PARAPSYCHOLOGICAL ORGANIZATIONS AND RESEARCH CENTRES

At this point only the major parapsychological organizations and research centres outside The Netherlands can be mentioned. The addresses are listed separately on page 16.

#### IN EUROPE

The oldest parapsychological organization is the British Society for Psychical Research (SPR) which was established in 1882. The main function of the Society is the collection and distribution of information relevant to the understanding of paranormal phenomena. The Society maintains a library, sponsors lectures and publishes a quarterly journal (Journal of the Society for Psychical Research) and a proceedings (Proceedings of the Society for Psychical Research).

The Institut für Grenzgebiete der Psychologie und Psychohygiene (Institute for Border Areas of Psychology and Mental Hygiene) in Freiburg, West Germany, was founded in 1950 and became affiliated with the Chair for Psychology and Border Areas of Psychology at the

University of Freiburg in 1954. The chair was held by Hans Bender until 1975. The new holder is Johannes Mischo. The Freiburg University offers courses in parapsychology and graduate degrees in psychology for work in parapsychology. Research interest is mainly focused on field studies, in particular the investigation of poltergeist cases and the study of individuals with alleged paranormal abilities. The institute publishes the Zeitschrift für Parapsychologie.

At the University of Edinburgh, Scotland, parapsychological research is conducted under the direction of John Beloff, senior lecturer in psychology. Research emphasis is on laboratory work on a wide scale ranging from social psychological studies to psychophysiological investigations and animal research.

#### OUTSIDE EUROPE

The American Society for Psychical Research (ASPR) was founded in 1885 and is located in New York. The ASPR maintains a library and publishes a quarterly journal (Journal of the ASPR), a proceedings (Proceedings of the ASPR) and a Newsletter. It also provides information by holding lectures, seminars and workshops. The ASPR has an own research department under the direction of Karlis Osis. Research emphasis is on survival, e.g. the study of death-bed visions and out-of-the-body experience.

There are three more parapsychological organizations respectively research centres in the New York area. One of them is the Parapsychology Foundation which was established in 1951. The Foundation provides financial support for research and education in the form of grants and holds a number of international and interdisciplinary conferences which are generally published. Furthermore, the Foundation publishes a series of parapsychological monographs and a bimonthly journal (Parapsychology Review). The Foundation also maintains a library.

In 1962, a Dream Laboratory was established at the Maimonides Medical Center in Brooklyn, New York, to study the dream state as a state of mind that facilitates the occurrence of psi phenomena. As in recent years, other psi-conducive states have been investigated, the Dream Laboratory has been renamed the Division of Parapsychology and Psychophysics. The main function of the Division is research; training is provided for summer volunteers.

At the City College of the City University of New York active

research in parapsychology is conducted under the direction of Gertrude Schmeidler, full professor of psychology in the Department of Psychology, who also supervises graduate work in parapsychology. Research emphasis is on the study of personality and attitudinal factors in relation to psi.

At the University of Virginia, a Division of Parapsychology was established within the Department of Psychiatry in 1968. It is the first parapsychological division that is completely integrated within an American university department. The main emphasis is on research which is conducted under the direction of Ian Stevenson. Besides the study of selected subjects, that is of persons who seem to possess psi abilities, research interest is mainly focused on survival, in particular the investigation of reincarnation cases.

In 1962, the Foundation for Research on the Nature of Man (FRNM) with its research division, the Institute for Parapsychology, was established in Durham, North Carolina (USA). It succeeded the old Parapsychology Laboratory of the Duke University where the first large-scale quantitative experiments had been carried out. The FRNM is directed by J.B. Rhine, one of the pioneers in parapsychology. The research conducted at the Institute for Parapsychology covers a wide area of parapsychological issues including PK and ESP experiments with unselected human beings and with animals, investigations of individuals with apparent paranormal abilities, etc.. Review meetings to which researchers from other centres are invited are held regularly. The FRNM owns the Parapsychology Press which publishes the quarterly Journal of Parapsychology.

Also located in Durham is the Psychical Research Foundation (PRF) which was established in 1960 for the investigation of phenomena relevant to the survival issue. Research emphasis is on the study of gifted subjects and out-of-the-body experiences and the investigation of haunting and poltergeist phenomena. The PRF publishes a quarterly bulletin (Theta).

In recent years, two more parapsychological organizations have been established in the USA whose main purpose is serious research. They are both located in Texas, the Mind Science Foundation which was established in 1975 in San Antonio and the Center for Parapsychological Research founded in 1976, in Austin.

At the Andhra University in India a Department of Psychology and Parapsychology was established in 1967. The Andhra University offers courses in parapsychology and graduate degrees in psychology for work in parapsychology.

Since 1957 the research workers in parapsychology are organized in the Parapsychological Association (PA). The PA holds an annual convention the results of which are published. Every fourth year, the PA Convention takes place in Europe, the other three years it being in the USA. In 1969 the PA became affiliated with the American Association for the Advancement of Science (AAAS).

## PARAPSYCHOLOGICAL PERIODICALS

The Journal of Parapsychology appeared first in 1937 and is published quarterly by the Parapsychology Press which belongs to the FRNM. It emphasis experimental papers.

The Journal of the American Society for Psychical Research has been in existence since 1907 and is published quarterly. The emphasis is on experimental papers, but in addition, many theoretical articles and case reports are presented.

The Proceedings of the American Society for Psychical Research first appeared in the eighties last century and thereafter from 1907 onwards. Experimental reports, theoretical papers or case reports which are too extensive for presentation in the Journal of the ASPR are published in the Proceedings, which appear irregularly.

The Journal of the Society of Psychical Research was first published in 1884 and appears quarterly. Until 1949 mainly reports of spontaneous cases were published, but thereafter also experimental papers and other useful information about parapsychology were presented to the reader.

The Proceedings of the Society for Psychical Research have appeared since 1882 and are published irregularly. Included in the Proceedings are major research reports, theoretical papers, collections of spontaneous cases and the Society's presidential addresses.

The European Journal of Parapsychology published by the Parapsychology Laboratory of the State University in Utrecht is a rather new periodical, the first issue appeared in November 1975. The European Journal, which is published twice a year, puts it emphasis on experimental and theoretical papers.

The Parapsychology Review of the Parapsychology Foundation has

appeared bimonthly since 1970 and is the successor to the Newsletter of the Parapsychology Foundation. The Parapsychology Review has a less technical style than the periodicals mentioned above and presents a great deal of information about parapsychological events such a lectures, symposia, courses and the latest news regarding persons and organizations associated with parapsychology.

The International Journal of Parapsychology published by the Parapsychology Foundation appeared from 1959 until 1968. Although discontinued, it is still a valuable source of information. The emphasis is on the relationship of parapsychology to other scientific fields. The International Journal contains general review and theoretical papers and also some experimental reports.

In Research in Parapsychology, papers, research briefs and addresses delivered at the annual convention of the Parapsychological Association are published. It has appeared annually since 1966 and represents the most complete record of on-going research in parapsychology. Until 1971 it was called Proceedings of the Parapsychological Association.

A German-language journal is the Zeitschrift für Parapsychologie und Grenzgebiete der Psychologie which is connected with the Freiburg Institut für Grenzgebiete der Psychologie und Psychohygiene. The Zeitschrift appears quarterly, the first issue being published in 1957/58. The published articles cover a wide range of topics; besides theoretical, experimental and general review papers on parapsychology, there are also articles dealing with the relationship of parapsychology to other scientific disciplines or topics not related to parapsychology, e.g. astrology.

#### USEFUL THINGS TO KNOW

#### HOW TO GET TO THE PARAPSYCHOLOGY LABORATORY

Utrecht is located more or less in the centre of Holland and is easy to reach by plane, train or bus. From Schiphol, the main Dutch airport, there is a regular bus service to Utrecht. The Parapsychology Laboratory is situated in the centre of Utrecht, only a few minutes away from the railway station and the bus terminal. Utrecht can be reached by car along different highways. Some maps to help you find your way are included in this booklet.

#### HOW TO CONTACT SOMEONE IN THE LABORATORY

People who wish further information or have a special request can always write to the laboratory. Because of the limited number of staff members, appointments are only made on the basis of previous correspondence or after the visitor has filled in a form stating the reason for his visit.

USEFUL ADDRESSES

ORGANIZATIONS AND RESEARCH CENTRES

American Society for Psychical Research (ASPR) 5 West 73rd Street New York, N.Y. 10023

Center for Parapsychological Research P.O. Box 5591 Austin, Texas 78763 USA

City College
Dr. G. Schmeidler
Department of Psychology
City University of New York
New York, N.Y.
USA

Department of Psychology and Parapsychology Andhra University Waltair Visakhapatam 3 India

Division of Parapsychology Department of Psychiatry University of Virginia Medical Center Charlottesville, Va. 22901 USA

Division of Parapsychology and Psychophysics Maimonides Medical Center 4802 Tenth Ave. Brooklyn, N.Y. 11219 USA

Foundation for Research on the Nature of Man (FRNM) Box 6847 College Station Durham, N.C. 27708 USA

Institut für Grenzgebiete der Psychologie und Psychohygiene Eichhalde 12 78 Freiburg West Germany

Mind Science Foundation 102 W. Rector Street San Antonio, Texas 78216 USA

Parapsychology Foundation 29 West 57th Street New York, N.Y. 10019 USA

Parapsychological Association No permanent address

Psychical Research Foundation (PRF) Duke Station Durham, N.C. 27706 USA

Society for Psychical Research (SPR) 1 Adam & Eve Mews London W8 6UQ England

University of Edinburgh Department of Psychology 60 Pleasance Edinburgh EH8 9TJ Scotland

#### PERIODICALS

Journal of Parapsychology Parapsychology Press Box 6847 College Station Durham, N.C. 27708 USA

Journal of the American Society for Psychical Research ASPR 5 West 73rd Street New York, N.Y. 10023 USA

Journal of the Society for Psychical Research SPR
1 Adam & Eve Mews
London W8 6UQ
England

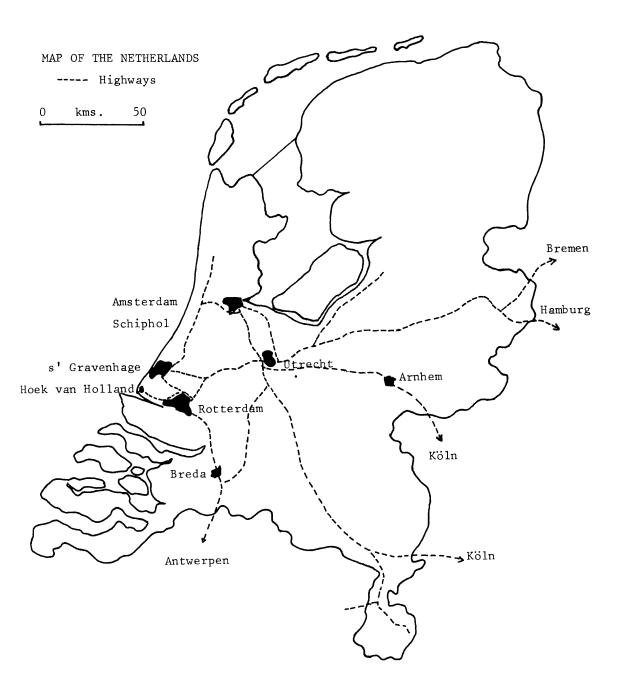
Parapsychology Review Parapsychology Foundation 29 West 57th Street New York, N.Y. 10019 USA

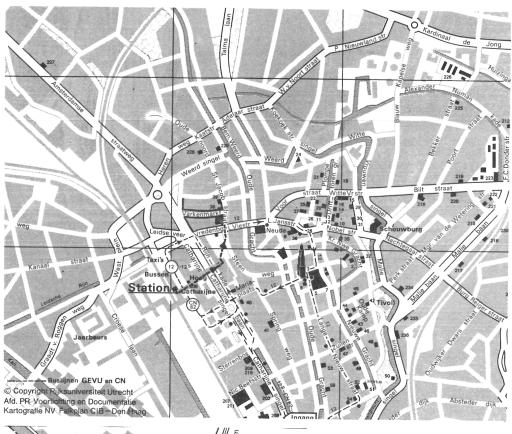
Proceedings of the American Society for Psychical Research see Journal of the ASPR

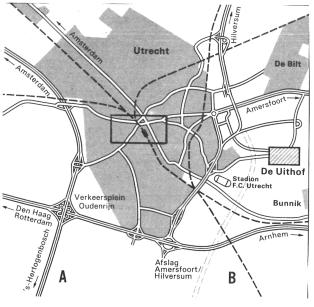
Proceedings of the Society for Psychical Research see Journal of the SPR

Zeitschrift für Parapsychologie und Grenzgebiete der Psychologie Institut für Grenzgebiete der Psychologie und Psychohygiene Eichhalde 12 78 Freiburg West Germany

European Journal of Parapsychology The Parapsychology Laboratory University of Utrecht Varkenmarkt 2 Utrecht 2501 The Netherlands







CENTRE OF UTRECHT

# CONTENTS

Parapsychology	p. 2
The Parapsychology Laboratory	
Organization of the laboratory	p. 4
The research programme	p. 5
Educational programmes	p. 8
Foreign guest researchers	p. 9
Facilities	p. 9
The European Journal of Parapsychology	p.10
The Research Letter	p.11
Parapsychological organizations and research centers	
In Europe	p.11
Outside Europe	p.12
Parapsychological periodicals	p.14
Useful things to know	
How to get to the laboratory	p.15
How to contact someone in the laboratory	p.16
Useful addresses	p.16
Maps	p.19
	p.20

#### THE RESEARCH LETTER

The Parapsychology Laboratory publishes at irregular intervals Research Letters. The aim of issuing Research Letters is to present information about ongoing research activities in the laboratory or from other research groups, and to provide an opportunity for researchers, who for some reason are not able to publish a manuscript in one of the regular journals, to have their publication printed in the Research Letter. In this way we hope to stimulate research activities as it is often frustrating, especially for younger research workers, when they are not able to communicate reports of their activities because they do not meet the standards required by professional journals. In addition, the Research Letters are a means of communicating deviating or controversial opinions or theories which, although we might not agree with them, merit publication because we feel that some people might be interested in them. Hence, we do not consider ourselves responsible for publications in our Research Letter which are not acknowledged by us and which do not state 'University of Utrecht' under the name of the author.

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22 PAVEL STEPANEK

### PAVEL STEPANEK AND THE FOCUSING EFFECT

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#### INTRODUCTION

In the USA J.B. Rhine had emphasised the need for ESP research with unselected subjects in the 40s and 50s and research with selected individuals was seldom attempted. The emergence in the early 60s of Pavel Stepanek as a high scoring ESP subject came as something of a surprise to some parapsychologists. There is little doubt that the successful work with Stepanek encouraged a more diversified approach to the whole field of parapsychology.

The extent of the research carried out over a period of more than 10 years and many other details which meet the kind of criticism which is often voiced against the acceptance of ESP, raise the work with Stepanek to a level of considerable substance.

In this paper the major research development with this subject will be summarised and an attempt will be made to clarify the meaning of the focusing effect and to discuss its relevance to future research. Although it cannot be claimed that all the peculiarities of the research findings are understood at this stage, the results are probably less obscure than might be imagined on the basis of a brief acquaintance with some of the experimental reports. It is also suggested that Stepanek himself is worthy of some attention. He has for many years participated with patience and dedication in a task which many would soon have found unbearable. Few papers have been published which do not contain some sincere words of appreciation for a man who has quietly helped to build up a substantial base on which further research can develop with added confidence and security.

In connection with research in which Pavel Stepanek participated, the focusing effect was discovered and introduced into parapsychological literature (Ryzl & Pratt, 1963; Pratt, 1967; Pratt, 1968). It may be desirable to clarify the meaning of this effect in general terms before it is considered in the context of research with Stepanek.

In the traditional ESP experiment in which Zener cards with 5

symbols are used as targets, individual subjects may have particular preferences for some of the symbols and may obtain scores for these symbols which are higher than those for others. In a way it would not be unreasonable to refer to these preferences as examples of a focusing process, that is, the subject is focusing on certain symbols. However, such preferences for symbols, which have been noticed almost as long as target symbols were presented in ESP tests, do not refer to the focusing effect as it has now become known.

If in a long ESP experiment one pack of Zener cards is repeatedly presented, the focusing effect occurs if the subject consistently and significantly scores above chance for say only 2 of the 5 cards displaying a circle, for say 1 of the 5 cards displaying a square and so on. In order to find out whether this kind of focusing is taking place, it is necessary to identify all 25 cards, with, for example, a small number and to enter on the record sheet for the target sequence not only the target symbols for each trial but also the identification number of the particular card.

It is not particularly surprising that some subjects have preferences for certain target symbols. It seems rather puzzling though, that a subject should have a preference for one or two out of 5 identical cards displaying the same symbol. This is after all what appears to be happening when evidence for the focusing effect which is taken as evidence for ESP, can be found.

Hopefully, this discussion has helped to emphasize the difference between preferred target symbols and focusing. However, it is also desirable to point out that this difference is not necessarily as clear as it may appear. As soon as the 25 cards of a Zener pack are identified by numbers, the subject may, possibly without being aware of it, regard the identification numbers and not the symbols as targets.

To reduce this possibility it would be desirable to use identifications which subjects cannot easily regard as targets. For instance, identical pieces of magnetic tape, attached to the cards could be encoded with sound signals for identification. If suitable encoding and decoding facilities can be provided, the identification signal on each card could even be changed after each trial. These possibilities were discussed in connection with

<sup>&</sup>lt;sup>1</sup>A pack of Zener cards consists of 25 cards, displaying 5 different symbols, such that each symbol is printed in an identical way on 5 cards, i;e; 5 cards with a circle, 5 with a square and so on.

24 PAVEL STEPANEK

tests in which Stepanek participated (Pratt & Keil, 1968) but the opportunities to work with Stepanek were too limited to introduce such changes.

Stepanek's success as an ESP subject has been limited to a particular test procedure which has not been widely used. Although the basic procedure is simple, variations which were introduced may create some confusion and it seems desirable to clarify some aspects at an early stage. As target material, office cards coloured white on one side and (for most experiments) green on the other, were concealed in opaque envelopes and on a few occasions in other containers. In all the experiments Stepanek was in the same room in which the targets were presented and in most experiments he was able to see the containers in which the cards were concealed. Under these circumstances particular care was taken to conceal the target cards and this was sometimes done through additional containers. The following terms will be used consistently to refer to such containers. (1) Covers made from thick cardboard stapled together and open at one narrow side. times envelopes (containing cards) were placed inside these covers. (2) Jackets made from two layers of manilla cardboard otherwise of similar design as the cover. At times covers (containing envelopes, containing cards) were placed inside these jackets. (3) Bookmailing bags also known as Jiffy bags of sufficient size to allow jackets to be placed inside these mailing bags.

The term container refers to any of these concealing devices, that is, envelopes, covers, jackets and mailing bags and at times each target was concealed in all these containers.

Throughout all these experiments Stepanek had only two response possibilities. During most experiments he could say either green or white. On a few occasions the targets were white on one side and a different colour but not green on the other and Stepanek's two response categories were changed accordingly.

#### SUMMARY OF RESEARCH

In a detailed summary paper Pratt (1973) has put 27 publications about a decade of research with Stepanek in chronological order<sup>2</sup>, based on the time when the research was carried out (and not on publication dates).

Within the limited space available it is necessary to condense the

<sup>&</sup>lt;sup>2</sup>Any of the 27 publications cited will be preceded by the appropriate index number.

material further and readers are recommended to pursue particular details in Pratt's summary or in the original research publications. An attempt will be made though to trace the recognition and development of the focusing effect in some detail.

Pavel Stepanek has lived all his life in Prague and in 1961 at the age of 30 he followed an invitation displayed on a public notice board to participate in ESP experiments which Milan Ryzl conducted. Milan Ryzl, a Czechoslovakian scientist, hypnotized subjects in preliminary training sessions which he believed enabled them to work successfully as ESP subjects. On the basis of the positive results with Stepanek, Ryzl's enthusiasm for his hypnotic training seemed initially justified. However, all the evidence at this stage suggests that hypnotic suggestions have little bearing on the rate of success during an experimental session with Stepanek and Ryzl has also failed to demonstrate that his training technique succeeded to produce other successful subjects.

While it is difficult to judge to what extent the hypnotic training sessions helped Stepanek to get started, hypnosis was not used except during some early tests series and on two occasions many years later when Stepanek failed to obtain significant results. A reasonable guess seems to indicate that out of the total experimental sessions with Stepanek probably more than 95% were conducted without any hypnotic procedures.

It is possible that Ryz1's early suggestions as to how a subject can be successful in ESP experiments may have induced a certain approach to the test situation which Stepanek maintained over a long period of time. However, it is doubtful whether hypnosis as such played an important part in this.

In the second half of 1961 Ryz1 started with formal tests (No. 1 Ryzl & Ryzlova, 1962). Stepanek had to indicate which side of each black and white card was facing upwards. These cards were concealed inside opaque envelopes and held in front of Stepanek. additional cardboard screen was placed between Stepanek and the envelopes. Highly significant results were obtained during 2000 trials. The cards were called correctly 57% of the trials. followed this up with a 'majority vote' test in which 100 cards were sealed in envelopes around which an additional opaque wrapping was stapled. In sets of 25 these envelope packages were presented in a random sequence such that Stepanek had to make a call 10 times for each card. The 10 trials per card were reduced to a single trial and on this basis Stepanek called 66 cards out of 100 correctly. During these first two series some form of hypnosis was used. At that stage Ryzl also tried other test procedures without success.

In a shorter series (No. 2; Ryzl & Pratt, 1962) significant results

26 PAVEL STEPANEK

were again obtained when Pratt visited Prague in 1962 and participated in the research.

After this visit Ryzl continued with his interest to demonstrate the possibility of communicating accurately by ESP on the basis of eliminating errors through repeated trials. He succeeded in obtaining 50 correct scores from 50 concealed cards by presenting each card repeatedly until a definite trend in one direction was apparent from Stepanek's calls (No. 3, Ryzl, 1966).

In this experimental series the envelopes were visible to Stepanek and his responses to some of them were almost immediately highly consistent. Since the same card remained sealed in the same way in the same envelope this consistency could have been due to perceptual cues on the envelopes which may have helped Stepanek to recognise some of the envelope sides again. However, if the envelopes concealed the colour of the cards completely the correct direction of the call could not have been based on such sensory cues and must have been due to ESP.

The highly consistent scores on some but not all of the targets presented (even though eventually all the targets were identified) were the first indication of peculiarities in the Stepanek scores which later lead to the recognition of the focusing effect. Ryzl's attempts to create test situations in which individual cards are to be identified by majority vote naturally also required the identification of individual cards and appropriate recording procedures. As suggested earlier recordings of individual cards were a necessary condition for the recognition of the focusing effect

During a longer visit to Prague in 1963 two experiments were carried out jointly. The first (No. 4, Ryzl & Pratt, 1963) was essentially a repetition of the one in which Pratt participated for the first time in 1962. Highly significant results were obtained when white and green cards were presented in 2000 trials. In the second experiment (No. 5, Ryzl & Pratt, 1969) new safeguards were introduced to the experimental procedure. Twenty white and green cards were sealed in 20 envelopes in such a way that neither of the two experimenters knew the position of the concealed cards. The cards remained undisturbed during 5000 trials and the envelopes were presented inside opaque covers.

At this stage the experimenters naturally regarded the white and green cards as the targets and interpreted results accordingly. In this framework the results were, although significant, somewhat strange. That is, some cards were called correctly on both sides, some were called correctly on one and incorrectly (to a significant degree) on the other and some card sides received no significant calling tendencies. On the basis of later findings it seems now

more reasonable to interpret the results within a framework where it is recognised that since the cards remained with the same envelopes in the same way, the envelopes rather than the cards were regarded by Stepanek as the targets although he was not aware of it. Another way of looking at it might be to say he penetrated the covers by ESP but did not proceed further.

During the next experiment planned by Pratt and Ryzl but carried out by Ryzl later (No. 6, Ryzl & Pratt, 1963) Stepanek called some concealed envelope sides consistently even though he had never seen them before. In the first place this may appear even more puzzling than to suggest that he responded to some cards positively and to some with psi missing and to some at random. However, it is likely that Stepanek had already formed a habit of responding to a target, through a combination of ESP and attention to perceptual cues without being aware of it, particularly in the earlier Ryzl ESP communication experiments. In these experiments Stepanek made the white green decision on the basis of ESP but probably with respect to at least some of the card sides, then maintained a consistent response by associating his ESP response with perceptual cues on the visible envelope. Whatever the fine surface details on the envelopes were with which Stepanek associated white and green responses previously, they may have prompted him to give consistent responses to similar envelope sides which he had not previously seen and which were concealed in covers. Although this cannot be offered as anything more than a suggestion to a rather puzzling phenomenon it seems to be in reasonable agreement with later findings in which response patterns which Stepanek developed on exposed objects (such as envelopes, covers, jackets) continued when these objects were later concealed. Of course, in this framework it would either be a matter of luck whether the card colour inside an envelope agrees with the response decision made to the envelope side or it may be assumed that Stepanek still penetrated to the cards by ESP but not to a significant degree. When the responses were accumulated with respect to the 20 cards used in the Ryzl, Pratt experiment (No. 5) the colours were not identified to a significant degree.

The jointly planned experiment (No. 6) which Ryzl carried out after Pratt's departure provided further evidence for focusing as well as additional details about the focusing effect. It was found that Stepanek continued with the same response patterns to the same envelope card combinations concealed in covers. Using different randomization procedures for the covers did not seem to affect the results. This suggests that at this stage Stepanek was not to any significant degree influenced (or distracted in the sense of the experiment) by the covers. When cards were shifted among the

28 PAVEL STEPANEK

envelopes this seemed to change the response pattern to some extent, suggesting that Stepanek did not respond to the envelopes completely independently of the cards they contained. Focusing occurred with respect to new cards and envelopes concealed in covers introduced for the first time with this experiment to the same extent as he responded to those envelope card combinations which were still used from the previous experiment.

Later in 1963 three Dutch scientists who visited Prague were encouraged by Ryzl to conduct their own test with Stepanek. In an experiment (No. 7, Ryzl and others, 1965) consisting of 2048 trials they obtained highly significant results. Cards again remained undisturbed inside particular envelopes. Ryzl had selected half of these 16 envelope card combinations from previous experiments in such a way that in terms of previous results correct calls on colours could be expected. The other half of the combinations were new and Ryzl expected a difference. A difference occurred in the expected direction but the significance was only marginal.

Pratt returned once more to Prague in 1963 and working on his own obtained significant results with new covers made from heavier cardboard. (No. 8, Pratt, 1964). This material had been tested in order to exclude the possibility that head radiation might explain the significant results. Blom, a Dutch scientist, joined him a few days later and both obtained similar significant results as Pratt has obtained working alone (No. 9, Pratt & Blom, 1964).

They continued with a more elaborate experiment consisting of 4000 trials (No. 10, Blom & Pratt, 1968). 40 cards remained undisturbed in envelopes for 1000 trials during which envelopes and covers were randomized and recorded. The aim of the experiment was to find out to what extent Stepanek was still able to call the colours correctly even though they were concealed in two containers. The results were highly significant and suggested that Stepanek was even under these conditions able to call the colours to a significant degree. When the calls for 40 cards during 1000 trials were analysed on the basis of a majority vote and when this procedure was carried out for each of the four sets of 1000 trials, it was found that Stepanek had called 96 out of the 160 cards correctly - 56 incorrectly while the remaining 8 had received tied votes.

This experiment was carried out with exceptional care and included many safeguards and was listed in Pratt's summary (1973) as one of the two major experiments with Stepanek which virtually compelled him to accept the ESP hypothesis.

When Beloff visited Prague in 1964, Stepanek's results appeared less consistent with apparent evidence of psi missing (No. 11, Ryzl,

& Beloff, 1965). Unfortunately, it was not possible to test for possible focusing on the envelopes which might have shown a result which was more in agreement with previous and later experiments.

More clear cut positive results were obtained by further visitors (No. 12 Ryzl, Freeman & Kanthaman, 1965; No. 13, Ryzl & Otani, 1967). However, in later tests Ryzl only obtained chance results and research was abandoned until 1966 when Pratt carried out a number of test series in Prague (No. 14, Pratt, 1967).

Until this time there had been little evidence that the exposed containers in which the targets were hidden, influenced Stepanek's In many experiments the randomisation and recording responses. procedure was such that such an influence would have been difficult to detect. Nevertheless, the experimenters had been aware of this possibility and in some test series the question had been examined. But so far no evidence for a significant interference through the exposed containers existed. Looking at this question the assumption was made that Stepanek, trying to identify hidden targets, might at times have been misled by small differences on the surface of the exposed containers to respond to these instead of the concealed targets. The tests which had suggested that no such interference had taken place were tests which yielded significant results on the concealed targets. This does not rule out the possibility that such interference was already present when Stepanek had relatively short unsuccessful periods. There is a relationship which suggests that it is easier to find evidence for this interference when success on concealed objects is low, because a perfect score on concealed objects would necessarily assure that responses on the exposed containers remain at random.

During his July visit to Prague in 1966 Pratt found for the first time evidence that Stepanek may have responded to the exposed containers. Although Pratt only regarded this as a possibility at this stage, on the basis of later research he came to the conclusion that the focusing effect of this experiment can best be accounted for by assuming that Stepanek responded to the exposed containers. In other words, this suggests that a focusing effect can develop which is based on sensory cues and which by itself cannot be taken as evidence for ESP.

In a later visit to Prague in November 1966 Pratt changed the recording procedure, putting on record the sides of the exposed containers, and found clear evidence for focusing based on sensory cues (No. 15, Pratt, 1968).

The 1966 results on concealed targets were only significant at times and the level of significance was generally lower. Under the circumstances it would have been easy to assume that Stepanek's ESP abilities were declining and that his sensory focusing was a kind of

30 PAVEL STEPANEK

imitation of an ESP process which ceased to function.

Considerable credit must be given to Pratt, who did not abandon research but pursued this problem further when Stepanek made his first visit to the University of Virginia in 1967.

In the first experimental series (No. 16, Pratt, 1968) success on concealed targets was only marginal but focusing on exposed objects continued at a highly significant level. In the following test as well as on many later occasions, Pratt used a technique which probably provided data in more concentrated form, providing what appeared to be higher significance levels for comparable numbers of trials. This was achieved by selecting from a set of 10 packages of test material (packages consisting in this case of 10 cards, 10 envelopes and 10 covers) only those packages which showed the highest focusing effects. Proceeding with four selected packages Pratt clearly established that Stepanek responded to the exposed covers and not to the concealed target material.

The next experiment was an important one (No. 17, Pratt & Roll, 1968). At a stage when Stepanek's results seemed to be based almost entirely on sensory cues, Pratt clearly established that the alterations in Stepanek's responses could once again be harnessed to provide evidence for ESP. This was achieved by concealing the previously exposed covers for which Stepanek had developed strong focusing effects on a sensory basis inside larger opaque jackets made from Manilla cardboard.

During the first experiment of this kind Pratt alternated 40 trials with covers as targets under concealed conditions, with 40 trials during which the covers were exposed as in previous experiments. Analysis showed that the focusing effect was highly significant not only under exposed conditions but also under concealed conditions. Moreover the significance under concealed conditions was equally high. Highly significant focusing effects were again obtained when the covers were concealed throughout an experiment which was carried out by Pratt and Roll. In a further test they found that when covers which had previously obtained significant results under concealed conditions, were compared with entirely new covers, only the old covers continued to indicate a significant focusing effect.

This was the first clear sign that test material which had been exposed during a large number of trials and for which Stepanek had developed a focusing effect on a sensory basis, was more successful as target material under concealed conditions than containers which had not been previously exposed. Moreover as the particular response patterns to particular covers generally continued in the same way under concealed conditions, it seems justified to assume that the sensory experience of future targets assisted Stepanek in later

identifying them by ESP. In the last test during Stepanek's visit to the USA Pratt and Roll (No. 18, 1968) compared target material made from cardboard and metal foil. Only significant results were obtained for the cardboard targets but there is some doubt whether the experimental conditions were sufficiently unambiguous to test the difference between the materials.

Later in 1967 Pratt visited Prague once more and with Jackson, Blom and Meinsma carried out an elaborate randomisation and recording procedure of cards, envelopes, covers and jackets (No. 19, 1969). Focusing effects on the covers were again highly significant but no significant results were obtained on either the cards, envelopes or jackets. This does suggest that when Stepanek was successfully responding to concealed targets, he was at this stage not responding to any significant degree to the exposed containers as well. In further tests (No. 20, Pratt & Jacobson, 1969) selected packages were tried out in order to obtain strong focusing effect within a relatively small number of trials. Highly significant results were obtained.

In 1968 Stepanek came for a second visit to the University of Virginia. While on study leave in the USA this author had an opportunity to participate in research (No. 21, Keil & Pratt, 1969; No. 22, Pratt & Keil, 1969). In a number of experiments highly significant focusing effects were found under concealed conditions. Alterations in the test procedure further strengthened the case for ESP. It was also found that Stepanek gradually started to respond to the exposed jackets in which the covers were concealed. When his response patterns had shifted almost entirely from the concealed targets to the exposed containers the previously exposed containers were concealed in larger ones and became the new targets. That is, jackets were concealed in book mailing bags of suitable size. At a later stage these book mailing bags again became targets, being concealed in larger bookmailing bags.

During three experiments a third experimenter participated and was given an opportunity to scrutinise the procedure in operation (No. 23, Pratt, Keil & Stevenson, 1970). A brief summary of the research was accepted for publication in Nature (Pratt et.al. 1968).

By the end of 1968 which included some experiments carried out in Prague later that year, some of the test material had been used for a large number of experiments and the focusing effect had remained remarkably stable for many of the objects over a considerable period of time. These correlations were carried out by referring to both sides of each object and they covered the research period from May to September 1967 (No. 25, Stanford & Pratt, 1970). Correlations were generally positive, in the range of .7 and above. They were also all statistically significant. Comparing series which were

32 PAVEL STEPANEK

carried out on successive days with those which were separated by a period of 4 months no differences were found. It could also be shown that some of the series which had produced marginal results in terms of the previous analyses correlated as strongly with other series as those with strong focusing effects.

Stepanek visited the University of Virginia once more in 1969. All further research was then carried out in Prague.

In general the period since 1968 did not produce ESP results at a comparably high level. Focusing based on sensory cues continued as strongly as before. However, when previously exposed containers were concealed as targets Stepanek's response patterns did not transfer to the concealed conditions or only to a limited extent.

It was found that Stepanek developed the response patterns at a rapid rate even when a large number of objects (60 to 100) were presented. This seems to indicate that Stepanek was able to categorise objects which look similar into two response categories. It seems unlikely that he could have remembered specific sensory cues on all the containers when such a large number was used (No. 26, Pratt & Ranson, 1972; No. 27, Pratt & Keil, 1972).

It may be in order to summarise the points which relate to the focusing effect.

Targets remained concealed during earlier tests within the same containers. While Stepanek was successful in calling the colours of the concealed cards he presumably tended to associate certain aspects of the exposed containers with these colours. Particularly during 'majority vote' experiments Stepanek perhaps tended to combine sensory cues with extra sensory responses. With the aid of sensory cues he may thus have been able to maintain a high degree of consistency in his responses and it seems reasonable that this happened more for some targets rather than for others. helped to alert the experimenters to consider questions which led to the recognition of the focusing effect. Although Stepanek did manage to call colours through two containers particularly during one major experimental series (No. 10, Blom & Pratt, 1969), he generally found it difficult to penetrate beyond the first container. Presumably because of the earlier associations referred to, he did not find it difficult to respond consistently to the relatively uniform grey surfaces of concealed containers with responses referring to colours (white, green). He was able to do this even when the concealed containers were used for the first time. When suitable randomisation and recording procedures were introduced, the focusing effect on concealed containers was gradually recognised as an ESP phenomenon.

At first Stepanek did not seem to be influenced by the exposed containers to a significant degree. However, at a later stage

response patterns to the exposed containers emerged without Stepanek's awareness of this, as a substitute for ESP responses. In other words, focusing effects based on sensory cues emerged while focusing effects indicative of ESP ceased. It was found that the focusing effects established on a sensory basis could be transferred to ESP conditions by concealing previously exposed containers which then became the new ESP targets. first the new containers did not seem to interfere with the transferred process of focusing by ESP but gradually Stepanek tended to respond more and more to the exposed containers. For many experiments these response patterns could be transferred again to concealed conditions providing further evidence for ESP. Towards the end of a very successful period when Stepanek demonstrated highly significant focusing after transfer to concealed conditions, there was nevertheless a suggestion that the exposed containers tended to interfere more and more rapidly. Focusing on a sensory basis has continued throughout all the latest tests with Stepanek but transfer to the concealed conditions has become increasingly difficult. It is possible that Stepanek has ceased to use ESP in a manner which can be evaluated experimentally. It is also possible that the experimenters have failed in recent attempts to adapt their procedures to further change which Stepanek developed.

### THE CASE FOR ESP

Most of the experiments were carried out either directly or in association with Pratt, one of the most experienced and careful experimenters in the field. The experimental safeguards were improved wherever possible and seem to meet the requirements of severe if perhaps not fanatic critics. Pratt selected two experiments which provided from his point of view, the most convincing evidence. This author is in full agreement with Pratt's selection and actually participated in one of the two experiments (No. 10, Blom & Pratt, 1968; No. 23, Pratt, Keil & Stevenson, 1968). In addition some consideration will also be given to some of the experiments carried out jointly in 1968 (No. 21, Keil & Pratt, 1969; No. 22, Pratt & Keil, 1969).

With more than a dozen experimenters obtaining positive results over a period of years, it seems justified to reject deliberate fraud as a serious counter hypothesis.

Safeguards to exclude unintentional transfer of information by normal sensory means were carefully maintained. In the experiments referred to (as well as in most others) two experimenters (or more) worked with a double blind procedure, such that none of the

34 PAVEL STEPANEK

experimenters knew the target sequence at the time when the targets were presented to Stepanek. Results were recorded by two experimenters in such a way that more than the minimum amount of information was recorded. If a discrepancy was later noticed the surplus information enabled the experimenters to record the trial in question without ambiguity. It should be noted here that discrepancies were quite rare and would not have had any impact on the results no matter how they had been scored. Discrepancies which could not be resolved without ambiguity were virtually nonexistent and occurred probably less than once per several thousand The raw data were transferred to punch cards by professional punch card operators and this transfer was checked by the computer before a statistical analysis was carried out. level of significance was generally so high, reaching astronomical figures when a number of experimental series were combined, that it seems quite unreasonable to suggest that such results could have occurred by chance. Moreover the significance did not just refer to an overall identification of targets but also to quite specific and relatively stable patterns. The overall significance remains extremely high when all unsuccessful experiments are included in the analysis.

There is really no doubt that Stepanek responded significantly to concealed targets. The only reasonable doubt that could be expressed is, could Stepanek have picked up information either intentionally or possibly without awareness by sensory means. Since in most experiments Stepanek could see the containers in which targets were concealed and in some cases could touch the containers, these questions have to be considered seriously. In the Blom & Pratt experiment in which Stepanek succeeded in obtaining significant results, two containers provided additional safeguards. Particular care was also taken to flatten out the target cards prior to use as it had been suggested that warped cards might convey information through the containers.

In the Pratt, Keil & Stevenson study, Stevenson was free to move around Stepanek and was able to view the procedure virtually from Stepanek's position. He expressed certainty that the procedure did not allow Stepanek to obtain any unsuspected sensory cues about the concealed targets. The weight of the targets had also been checked and adjusted to within .1 gram.

Stepanek had failed to obtain significant results during his 1968 visit when targets were concealed in flat cardboard boxes which imposed an air space between the inner surface of the box and the target. Although it is not certain whether these experimental conditions or other factors were responsible for this lack of success, as a result of this failure the experimenters paid

particular attention to the possibility that exposed containers might convey small contour differences based on small differences between the targets. However during the same visit in 1968 some changes were introduced on the basis of which the contour counter hypothesis can be rejected with confidence. Stepanek had developed significant and quite specific focusing on covers which were concealed in jackets made from double layers of manilla cardboard. The experimenters then decided to fill up the space between the two layers of manilla cardboard with cotton balls in a similar way as book mailing bags are padded with shredded paper. Additional flaps were also taped over the open ends of the jackets. These were quite drastic alterations indeed, changing the contours of each jacket substantially, yet Stepanek continued with the same significant focusing for the concealed covers.

Smell was also considered as a possible sensory means of identifying the targets. Although it would be difficult to assume that targets which are randomised between different containers could continue to provide olfactory information over more than a few trials, it seems virtually impossible to assume that the two sides of the concealed targets could be distinguished by smell. Within the present framework of known sensory processes there seems to be no way by which Stepanek could have obtained the significant results. Consequently it seems justified to present the Stepanek research as substantial evidence for ESP.

# PAVEL STEPANEK AND HIS ENVIRONMENT

Pratt (1973) provided the most comprehensive summary about Stepanek as a person. Within the space available here only those aspects will be discussed which seem to have a bearing on his long career as a successful subject.

Stepanek is a sensitive person, yet he does not share the frequent spontaneous experiences common among sensitives in the field. With one exception Stepanek had no spontaneous experiences which he regarded as paranormal. Without the almost accidental participation (on the basis of a public notice) in the early tests conducted by Ryzl, Stepanek might never have considered himself in any way gifted as far as paranormal abilities are concerned.

While many factors which have a bearing on Stepanek's career as an ESP subject may be associated with relatively stable personality characteristics, it must be kept in mind that there are environmental circumstances associated with a country belonging to the Ostblock which probably also played a role by themselves as well as in relation to existing personality traits.

Stepanek, although fairly well informed on current affairs, is

36 PAVEL STEPANEK

not in any way a political man. His interest in cultural events of which Prague has a proud reputation, is also extremely limited. With these two areas largely removed, Stepanek's life is remarkably uniform and uneventful. In one way this seems to suit his life-style, in another way it must be recognized that although the uniformity of Stepanek's life is fairly extreme, it is far less uncommon in a country which regulates social securities to a far greater extent than is typical in the West. Under the circumstances expectancies operate in somewhat different dimensions.

Stepanek has worked for most of his life as an information clerk. Pay scales for this type of work are low and opportunities for advancement are quite limited. Against this background it is perhaps not so surprising that Stepanek appreciated the interest with which a number of visiting scientists regarded him even though it meant participating in a test routine which many other subjects find quite unbearable.

This author encouraged students to participate as subjects in similar experiments (Keil, 1971) but so far the main problem has been to find subjects who were willing to participate for a sufficient length of time. In comparison Stepanek's unfailing willingness to go on for thousands of trials is even more remarkable. Yet the restraints under which Stepanek lives might also have helped to preserve his abilities over a longer period of time than might have been the case for a successful subject in the West. The fact that most of the tests with Stepanek had to be arranged for relatively short periods during which experimenters visited Prague or Stepanek visited the USA necessitated long intervening periods during which Stepanek had a complete rest from all ESP activities.

It does not seem unreasonable to speculate that Stepanek had, and probably still has, certain special abilities which enabled him to score significantly under different experimenters and in different surroundings. At the same time it is not at all certain whether Stepanek would have continued as successfully if he had lived in the West from the time when the first experiments were successfully completed.

### FUTURE IMPLICATIONS

The most satisfactory framework within which a large number of the successful ESP focusing experiments seem to fit, suggest that through associations or conditioning Stepanek was assisted in making consistent responses under concealed conditions (No. 22, Pratt & Keil, 1969; Keil, 1971).

If it is assumed that a target in an ESP experiment has an ESP stimulus configuration to which the subject responds, then it may also be reasonable to assume that the ESP stimulus configuration of the target is still in existence and interacts with the subject by ESP even if the target is partly revealed on a sensory basis. In other words, if a subject is trying to respond by ESP to a target and can at the same time, without being aware of it, perceive some sensory cues from the target, then the subject is in fact responding to sensory stimuli as well as to the assumed ESP stimulus configuration of the target. If the sensory cues are small and if the subject is unaware of them, conditions are probably most favourable for ESP to operate at the same time. If the sensory cues are just strong enough to assure a significant response rate from the subject, then the predominantly correct responses to the sensory cues become associated with the relatively weaker ESP stimuli. After many associations of this kind it is likely that the correct responses to the ESP stimuli will continue without additional sensory cues at a higher rate than would have been possible without the previous sensory associations.

This seems to be in good agreement with the results which Stepanek obtained when he was able to transfer response patterns which he had developed on the basis of sensory cues to concealed ESP conditions.

These assumptions are not seriously questioned by Stepanek's earlier more spontaneous success without any prior sensory association. At that stage Stepanek was simply responding readily enough to ESP without any prior help, so to speak.

It is not quite so easy to account for Stepanek's increasing inability in recent experiments to transfer response patterns based on sensory cues to concealed conditions. However, sensory cues can be of no help if they are not associated with a simultaneous ESP process. It is possible that Stepanek has lost his ESP abilities altogether. It is also possible that Stepanek has concentrated his responses on sensory cues to such an extent that ESP processes became inhibited. On a speculative basis at least, it seems reasonable that ESP is more likely to be excluded when the sensory cues become more prominent. There were indications that even when Stepanek was still able to transfer his response pattern to the concealed ESP conditions, he tended to be influenced by the sensory cues at an increasing rate. is little doubt that when Stepanek was first able to transfer his response pattern to the concealed ESP conditions, he was himself not aware of this process. There is also no doubt that Stepanek continued to follow instructions which suggested to him that his

38 PAVEL STEPANEK

task was to call the concealed targets. However, it is likely that Stepanek became gradually aware of the fact that the experimenters were at times also interested in his responses to exposed containers, and this may have produced increased concentration on the sensory cues.

Along the lines of these arguments, successful transfer to concealed ESP conditions may possibly be re-established if the sensory cues can be reduced under exposed conditions. A short experimental attempt in this direction was made by this author in 1974. Results were inconclusive but not discouraging.

Within the association framework suggested here it is assumed that normally the successful transfer to concealed ESP condition is assisted because a particular container side with its particular sensory cues is associated with its particular ESP stimulus configuration. Assistance through such associations is less likely when a large number of different containers is presented. It was found though that Stepanek was able to sort 60 to 100 similar objects into categories on a sensory basis (No. 26, Pratt & Ranson, 1972; No. 27, Pratt & Keil, 1972). However, since no transfer to concealed conditions took place for such a large number of objects this result is not in disagreement with the association framework. There is little doubt that when the number of targets was small, Stepanek responded on a sensory basis to specific sensory cues on some of the containers.

It would be of considerable interest to see whether conditions can be found which enable Stepanek to score once more at highly significant levels under ESP conditions, but even if no success of this kind can be achieved there is still the possibility that what seems to be an adequate framework into which Stepanek's results can be fitted, can also be used in experiments with other subjects.

There is no doubt that a substantial percentage of unselected subjects will without awareness, develop focusing effects based on sensory cues (Keil, 1971). This author had however, only a very few opportunities to see whether a transfer to ESP conditions might take place. One major problem seems to be that the relatively slow and cumbersome procedure discourages subjects and other student experimenters. Fitting such experiments into a course programme, it was usually not possible to change from exposed to concealed conditions within a few days. However, after an interruption of weeks it was often found that the initial response pattern (based on sensory cues) had changed to new ones and frequently changed repeatedly in the few cases where continued testing was possible. It is possible that the relatively high

degree of stability in Stepanek's response patterns is one of the characteristics of a successful subject with respect to the ESP focusing effect. So far this author only found one student with a similar degree of stability but testing could not continue as this subject left for overseas.

Hopefully, attempts will continue to find conditions under which assistance for ESP might be provided through associations. This might be done with the somewhat complex experimental procedures which evolved through the research with Stepanek. It could also be more generally attempted by realising that the all important conditions for an ESP experiment, that is, to exclude all sensory cues, might provide a wrong starting situation. There is at least a suggestion from the early work by Rhine that the less stringent starting conditions (when sensory cues might still have been present) produced a remarkably high rate of success which nevertheless continued when controls were later tightened.

So far the strengthening of ESP through a preliminary association with sensory cues has only been considered within a somewhat mechanical framework. It is also quite possible that the practices of pre-scientific cultures to apparently produce paranormal happenings by first deliberately enacting similar happenings, provide the optimal psychological conditions, conditions which are usually carefully excluded in most ESP research.

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#### THE FUNCTION OF THE PARANORMAL

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"Some things go on unnoticed because they are too great"

Unknown

### INTRODUCTION

We need the following results, hypotheses and concepts of parapsychology:

- a) Inductor action: similarly as a knot tied in my handkerchief can remind me of something associated with it, an inductor is sometimes capable to make a psychic 'mind' feelings, thoughts, etc., associated with that inductor, the association process this time occurring inter-individually, e.g. in a possibly four-dimensional network of psychic events.
- b) Psi phenomena indicate that psi communication between the unconscious of A and the unconscious of B is more easy than conscious minding of concrete contents by A from B's mind. Moreover, psi communication of feelings and psychic contents charged with strong emotions tends to be more easy than one concerning merely dry facts.
- c) It does not seem to be far-fetched to assume that an individual will perceive or undergo psi impressions more easily if they stem from, are 'emitted by', many, a whole group, than if they only exist in one other psyche (to which the individual concerned is not especially related). Continuously existing feelings and thoughts, at that, may tend to be transferred more likely than incidental ones. d) Following Koestler (1972) we start from the hypothesis that the psi capacities are integrative capacities, which play an integrating, coordinating part in the 'supermind', a large psychic organism of which the individuals in a sense are cells. The achievements of clairvoyants and mediums are then more extreme manifestations of

what normally happens functional-inconspicuously and also more unconsciously.

Probably correctly, Koestler reckons the so-called curious coincidences among the psi phenomena, too. Within the scope of our hypothesis, they are more striking (and often meaningless) manifestations of coordinations in the (inter-individual) course of events, which coordinations normally, among other things, serve the evolution of the whole, e.g. by helping realize certain deeper unconscious trends. Indeed, in accordance with the hypothesis it seems probable that it is a main function of the psi capacities to bring about trend-like coincidences, coordinations. e) Mental under-currents of all kinds and the fact that inventions are sometimes made independently of each other in different places at the same time may possibly serve as an illustration. In the same way, the development of often meaningful myths and also the formation of languages or even whole cultures demonstrating a subtle coherence and logic if we investigate them without any 'participating' individual seeing these through in any way - let alone that he could built them up in consultation with others - might partly be seen as performances of integrative capacities, of group minds which are, as it were, complexes within the large psychic network. A circumstance such as the one that, after a very long period of prehistoric development, in mutually widely distant regions: China, India, Mesopotamia, Egypt, and Middle- and South-America, the historic period, to the corresponding standard, started almost simultaneously, with the building of towns, writing and several other essential characteristics of civilization, constitutes an additional strong indication in this direction, for the existence of deeper coordinations.

### PERSONAL EXPERIENCES

Striking coincidences, remarkable concurrences of circumstances, drew attention from several sides. E.g., in 1937, W. von Scholz's 'Der Zufall und das Schicksal' appeared, which supposes an "attraction between the mutually related" and stresses the coherence which would often be produced in one's life by the relevant phenomena and which, as von Scholz puts forward, has already been pointed out by Goethe and Schopenhauer.

If we want to find laws with, regularities in, or to put up hypotheses about the appearance of striking coincidences and remarkable patterns in the (inter)human experience with which integrative forces might play a part then, in the present early stage of research, the observation and, among other things, the careful psychological analysis of possible own experiences constitute a practically indispensible starting point.

It is in this light that I bring up relevant personal experiences here. Not those - very rare - spectacular ones which as far as I can verify give no indications with respect to any kind of general laws, but such ones - usually being less spectacular - which, as it appears at least in my life, really show patterns. To what extent I am a relative exception in this respect I don't know. I am conscious of it that the conclusions of a more general nature about the functioning of certain integrative processes, of (parts of) the super-organism referred to in the Introduction, which we shall draw in the following, have to be carefully handled and might be influenced by the special nature of my experiences, my circumstances and my personality.

The coherences concerned are the following:

- a) Shortly before lectures I give (a few times a year), and, in my teaching profession, shortly after I happen to spend a lesson on an enthousiastic discussion of more emotionally charged subjects than mathematics, it remarkably often occurs that some disappointing news reaches me.
- b) With my scientific work it has happened remarkably often that I come across literature, data or a stimulating utterance which I need at that moment, without my specially looking for it.
- c) Those few times I was in a special mood in which I felt very heavily wronged by life and was experiencing about this a 'holy indignation' and an intense moral disdain for the forces directing my fate (and which, on these occasions, I partly personify), then, far more often than not, some rather important happy event befell me shortly afterwards. In the concerned mood I disengage myself intensely from 'this whole mess'.
- d) If wholly contrary to what has been described in c I intensely invest my hope and aspiration in life: strongly look forward to something or strongly and protractedly strive for something or think especially nicely about a person, then strikingly often the event hoped for does not come off, the object striven for is not attained or the relevant person gives me a disappointment.
- e) An attitude of mind whereby I detach my mental energy, especially striving and hope, from the worldly, from aims here and now, and, as it were, transfer it to a deeper, more or less pre-conscious level of my psyche, at the same time pervading that striving and hope with an atmosphere of both vigor, solidity, and purity, and which then dominates me strongly, tends to be followed by both favorable experiences and as such seemingly senseless striking coincidences and not always unimportant cases of precognition.

  f) Important favorable events occurring in my life without my doing
- f) Important favorable events occurring in my life without my doing did so remarkably often via Jews and other persons in a

psychological 'outsider' position.

"If ESP is of human importance, it is reasonable to suppose that it contributes in some orderly manner to the experience of the individual" (2). In my case it is not extra-sensory perception which, in the first instance, constitutes an important fact in my existence, but that other category of paranormal phenomena: the quite too - remarkable coincidences.

The conviction that it concerns real continuous threads here, and which forces itself simply upon us, is even deepened by the circumstance that most trends described under a. thru f. seem to fit into one pattern together, too: if I invest my energy, strivings and hope strongly in 'this life', in my (social) environment, especially if I strongly turn positively to 'the others' (also in the sense of feeling myself dependent on them), then this often invites misfortune; if I detach them - especially if this happens in an intensely charged way, as an efficient defense and disqualification - and transfer them to a special appealing and pure deeper level of the psyche, then this works favorably. In this way the points mentioned under a, c, d, and e fit into one pattern: The transference of libido, of aspirations and hope, from one association complex to the other is essential.

### PROCESSES IN GROUP MINDS; THE MINDING AND REPRESSING OF EVENTS

In an even line with what von Scholz, Salter (1961), Koestler (1972) and others feel can be observed as association and intelligence in 'group minds' or super-individual association complexes, we can put as a preliminary hypothesis that 'strivings', certain trends, play a part therein, too, and may cohere with and affect (interindividual) psychic conflicts.

We now put up the following central hypothesis which, as will appear, explains the experiences summed up in the previous section completely:

The way and the measure in which our life as an individual is influenced in a favorable (co-operating) or unfavorable (opposing) sense by integrative forces is determined to a high degree by a) the association-kernels with which one is connected by the direction of one's attention and which may be associated with sympathetic or hostile strivings; these kernels play the part of the inductors of clairvoyants, this time only partly by making our psyche mind itself selectively facts, knowledge, but much more by also admitting thereto, at least to our unconscious influencing our action, sympathetic or antipathetic forces from outside, by giving them a hold, by making us 'mind' them, and in the third place by influencing the action of others in relation to us;

b) the intensity of the mental energy and especially positive striving and hoping 'attracting things to us', which one directs to the association-kernels concerned.

With respect to b. it is relevant to remind the fact that, e.g., mr. G. Croiset the psychic is particularly sensitive to the circumstances of drowned persons. As a child, he himself was once almost drowned. The inductor 'drowning' is strongly emotionally charged for him.

With our latter hypothesis it has to be observed that the average individual almost continuously and via numerous objects, situations, habits, etc., has associative-inductorlike contact with the group(s) with which he socially interacts. In view of this cumulative effect and of b. and c. of the first section, group minds may have much more influence on individuals than the rarity of clear paranormal achievements suggests.

If a large portion of a population is pervaded, e.g., with a strong national pathos, and connects this to a rather high degree with matters such as a national flag, a king or leader, symbols as a swastica or a Lorraine cross, national songs and a whole series of other collective cultural items of the relevant group, then those flags etc. can function as inductors and transmit the feelings concerned to less interested, lukewarm compatriots, too, in the way in which an article of dress of a suicide sometimes transmits the latter's feelings in his last hours to a clairvoyant. In this way, massively existing feelings and attitudes of mind can spread inductorically, too; even believers and soldiers can be induced to adaptation and sacrifice. It is not accidental that the collective symbols, the kings and crosses, have always been considered so important! Those symbols don't only make us 'remind' feelings but, in the integrative even line thereof, they make others 'mind' these, too.

A powerful psi inductor may have been Adolf Hitler, with whom intense feelings and aspirations of innumerable Germans were associated. Does this explain Hitler's 'magnetic hypnotic force'? Did he transmit sentiments of millions?

The circumstance that Hitler escaped several attempts on his life in a rather remarkable, very accidental way, might fit into this pattern: the integrative strivings— and association—complex of the nazi—Germans, their 'group mind', with which he was much stronger inductorically connected than with corresponding ones of his enemies, protected him via coincidences against their plans. Just at the right moment he bowed over the heavy table on the 20 of July 1944, he left in a hurry the exposition where the officer with the bomb showed him over the place, the bomb in his airplane did not explode because of a small construction defect ... Did

unconscious psi signals do their work?

If it happened this way we see here an example of how an integrative complex frustrated an intention, 'repressed' an event. That complex then played an analogous part as the unconscious complexes which, with the neurosis of an individual, can sabotage his actions and repress his feelings, which can cause 'Fehlleistungen'.

Apart from the case of Hitler, the idea of integrative repressing activities of group minds forces itself upon us in relation to the extremely epidemic character which the most absurd and morally objectionable ideas, too, often had in history, without any contrary opinion, nonconformism of importance, manifesting itself. Before Erasm, almost nobody protested during several hundreds of years against the prosecution of witches, at which people openly tampered with the scales on which they were weighed, though many in power could have done it without danger for themselves. Protests against the enormities of Christian theology remained extremely rare for many centuries; one quarreled about comparative details. As regards cruel punishments and popular habits, and mental epidemics based on not a single reasonable argument such as the sexual taboos, something similar holds.

Besides these social phenomena, the tendencies in my own life described in the previous section - with which for years I could observe curious relations between, on the one side, my own feeling and action and, on the other side, experiences coming from outside - constitute a strong indication for the existence of inductorical-integrative processes.

After the foregoing, the explanation of these experiences can now be given as follows:

a) So far as the whole of mental attitudes, preferences, antipathies and taboos which dominate in our society is represented in a group mind, my mental attitude will conflict with that integrative complex to about the same extent as my writings do with the mentality of the majority (4). In this sense I am a nonconformist, a 'Fremdkörper' in the whole. Particularly, both my feelings and my rationalist philosophy continuously aim at making conscious, in as direct, 'rectilineal' a way as possible, of preferably exactly the most charged, the most essential, of what our society so often represses.

So little solidary as I am with 'the group', so intensily I feel it myself with the deeper evolutionary under-current which I see in what happens in the world, with the silent force I experience within myself, too. Exactly this made it possible to me to be a nonconformist.

b) A neurotic complex, i.e. an unconscious complex sabotaging conscious ambitions and actions because oppositely directed strivings and inclinations belong to it or are associated with it, gets more influence to the measure wherein

1) psychic contents that are connected with it associatively or otherwise come to the attention of central consciousness, and 2) more emotional energy, especially, therefore, strivings and hope, is committed to those contents or is associated with them. c) The difference between those who - compare our earlier discussion - conformed themselves docilely to the group minds, to the integrative forces which, among other things via inductors such as the flags, crosses etc. mentioned, made the masses 'mind' the current orthodoxies and ideologies, and on the other side the nonconformist, now, is that for the latter the integrative complex concerned, at least as regards the emotions and strivings belonging to it, completely remained an unconscious complex. The former admitted it to their consciousness; it became a part of their conscious personality. For the latter it is not so much a repressed as well as an intruding unconscious complex which, this time, merely extends unto far beyond the relevant person's mind and therewith also the 'sabotaging' influence which, analogous to that of ordinary neurotic complexes, it can exert with respect to his conscious ambitions and acting. 'Acting' has only to be supplemented this time with experiencing, because the striving and acting of others. too, can be put into service of the 'sabotaging purpose'. d) My most striking, ever-returning experience was now that reverses were connected with my emotionally turning attention, energy of positive nature, aspirations, hope or sympathy, to the 'worldly complex', to 'the others' or objects which had their and mine common attention, whereas favorable events seemed to be evoked by on the one side a charged defense against, debunking of, 'this whole mess and on the other side a turning of my charged attention, energy, to the sphere meant in the last paragraph of a., to the association complex of 'the kingdom of God'.

The first happened at the lectures and comparable situations whereby, to a certain extent, I 'chargedly engage' myself into a group situation. It could also happen if I strongly and prolongedly directed my strivings and hope toward, e.g., stocks or (worldly) sexually attractive women which (who), like the flags and symbols mentioned above, connected me inductorically with 'the others' sharing such or similar instinctively charged attentions.

What happened, so the most probable explanation within the scope of a., b., and c. seems to be, is that the (in me) unconscious 'sabotaging integrative complex', the part of the group mind in my unconscious, got more hold on me and my situation, also because

it became charged with more energy, according as I directed my attention and aspirations to inductors, association-kernels, which are associated with it. To that measure I, too, was stronger connected with it communicatively and incorporated and integrated into the coordination, the striving of it, I was directed by it according to the pattern of coincidences it aspired, the action of me and others who co-determined my experiences were more influenced via the unconscious, coordinated, e.g., partly via (the disturbing of) psi communication between them and me. Negatively influenced, with respect to the unloved nonconformist: an 'expulsion', depression of the unadapted, a kind of voo-doo by the group.

If on the contrary I was strongly connected with the earlier mentioned deeper under-current in the super-organism within which we can see our (local) group mind as a partial complex, if I transferred, as it were, my libido to that, then I experienced support in a comparable way.

If there is truth in what von Scholz says (op.cit., p.193): that the Golconda stone used to bring misfortune on its possessor because it was associated inductorically with earlier crimes in order to get it in one's possession, after which it would have begun to function as 'attracting' inductor, then one can say to some measure that a certain complex of situations, objects and occurrences to which I attach myself in a partly hostile world functions as a Golconda stone to me.

The way in which such a complex 'directs' men possibly shows affinity with the unconscious telepathic hypnotic suggestion while further, in the same way as in the case of the Golconda stone and with psi actions in general, time-barriers are often no obstacle, so that events in an individual's life can also be 'organized' precognitively, in view of the future, and, e.g., my reverses in connection with the lectures may also follow then from earlier performed, suggested actions.

What happened in my case was that parts of the group mind caused me reverses by preventing the realization of aspirations, by 'repressing' them as events, as 'private' neurotic complexes can do within the smaller scope of the individual psyche by means of influencing psychic processes. And in the integrative as well as in the individual case the supply, via association-kernels (inductors), of energy, striving, to the sabotaging complex stimulates the negative phenomena. This now also explains why the detachment mentioned in the previous section and in general indifference for, the deflection of strivings and hope from, the earlier mentioned charged inductor domains or association-kernels had a favorable effect.

Finally, my experiences as a whole can be compared in some

measure with those of the participants in the well-known cross-correspondences, whose writing (that is, action) was paranormally coordinated.

I discussed my experiences as an example. As an example of a psycho-analysis of events and of the way in which we very probably have to imagine the functioning of integrative processes. Processes which in our case took place under the influence of a sabotaging complex, this time of a super-individual, integrative nature, which makes the 'event-neurosis' concerned a phenomenon completely analogous to normal, individual neuroses with which sabotaging, resisting complexes from the unconscious obstruct the aspiring of the conscious I. In both processes the conception of strife, conflict, is central.

Continuing the above parallel: if I give inductorical hold to the complex, if, as regards feelings, I open myself to a high degree to the group mind, then we can speak of incomplete, unsuccessful repression and, therefore, strengthened influence of that complex. The complex that detests the feelings and does not listen to the arguments of the unadapted, the militant nonconformist, which threats to the collective repressions (compare a.) it wants to repress, too, as at the more visible level their written manifestations are ignored, 'repressed' by 'the club', by the network of in-crowds. Wants to repress them as it managed indeed so often to repress them in the psyche of the adapted, the conformists of all ages. So much effectively that the very striking paucity of real nonconformism in history of which we spoke already probably is largely a consequence of it.

Partly summarizing we can formulate one of the main conclusions of this section so that the action of inductors and psi in general not only relates to cognitive impressions but, via these, and moreover especially via psi communication (mainly at the unconscious level) with respect to feelings and strivings, to (very often inter-individual, group) events, too, which can psi-inductorically be evoked (minded is not entirely the correct term) or 'repressed'.

Some experimental results, described in parapsychological literature, which are to a high degree relevant with respect to the 'group mind voo-doo' described above and the related problematics, are the following:

1) "In one pair of clairvoyant type runs (the 'success' runs) the agent was instructed to hope (without knowledge of the target) that the percipient would succeed, in the other pair (the 'failure' runs) the agent was instructed to hope . . . that the percipient would fail.

There was a negative correlation between total GESP scores and

'failure' scores. ... There was a low positive correlation between GESP scores and 'success' scores. ... a facilitating or inhibitional role of the agent, apart from transmission of targets! (5) A similar experiment is described in The Journal of the American SPR, 1961, pp. 94-96.

- "Those subjects whose interest inventory scores did not differ markedly from the group median gave positive ESP results as a whole, while that group of subjects whose scores were at the extremes of the interest score frequency distribution ..., gave significantly negative ESP scores! (6) (This quotation is in particular of importance in connection with the relation between nonconformism and the psi phenomena.
- 3) "... that in the great majority of spontaneous cases of telepathy, a preoccupation of the percipient with the activities of the agent is obvious in the record". (7) This quotation is especially relevant in connection with the surmise that my turning of attention to (inductors associated with) the 'worldly-social complex' seemed to give this more hold, more influence on my experiences. Compare our central hypothesis, too.

That the supply of psychic energy is important to the activating of a certain complex within the super-organism might also be suggested by the course of events with mediamistic phenomena: 'complexes' which at least have a close relationship to (the earthly experiences of?) a deceased, seem to use energy of the medium (and of others present, too?) in order to be capable of manifesting themselves via this medium, of 'speaking through his (her) mouth', and model the conduct of the medium 'in their own image'. Well, the same thing might hold true for other complexes which want to 'direct' an individual: they need its psychic energy. The mediamistic phenomena might possibly constitute anyway only a more acute case of 'possession', of being (partly) directed by an integrative complex as it occupied us in this section.

Relevant in the whole preceeding context is:

4) "... once the thought entered my mind already that it would probably be a much better psychoanalysis if, instead of dreams, one would examine men's experiences, in order to get insight into their soul this way and to be able to act curative there!" (8)

### INTEGRATIVE PROCESSES AS A SOCIAL FACTOR

We already discussed the possibility that certain important cultural developments and achievements came and come about under the influence of integrative forces and capacities which, then, at the same time would demonstrate an evolutionary and social main function of those forces and capacities. We also pointed to the conforming

effect which integrative forces working rather in a line with timely and locally bound human situations and aspirations probably possess. As regards the inductor function of the flags, common habits and the like mentioned with this the following quotation is important: "The tribal native's ... apparent ESP is often mediated to his consciousness by a totem symbol;" (9)

The totem: pre-eminent collective concentration point of emotions for the natives, like our flags and kings, but also like our sport and sex idols, clearly seems to play an active part as psi inductor with them, which might have a parallel with us.

It probably belongs to the collective 'blind spots' themselves of our culture that one simply does not realize what proportions conformism assumes with us, too. That one does not realize that it requires an explanation when, after the extreme conformism of the past: about the witches, about theology, about cruel executions may perhaps have been explainable by fear, we now see, too, without menacing dangers existing, that, in the midst of the flow of words about sex, practically nobody talks about the only relevant thing: the scarcity of attractive individuals and of rational. systematic ways of making contacts; that, in a world crammed with deceit, everybody stays silent about using lie-detectors, e.g. in politics; that again the great fashions - the thesis that 'all men are of equal value', the contention that 'it is quite a question whether we made real progress during the last ages', ... -, are followed by practically the complete speach-making community, in spite of their contrariety to the most elementary observations, whereas against a dominating literature from which all sense, line, and emotion are absent, practically nobody offers resistance.

The conformism in question and the repression of elementary facts and truths go so far that normal psychological and sociological explanations seem to fall short.

That falling short compels us to look for another explanation, the explanation which forces itself upon us from, among other things, the psi inductor action of the 'totems' in the broadest sense, and which in domains associated with the group culture and emotionally charged areas, tends to make majorities of 99 percent of majorities which, without that action, would have been 75 percent.

Those 75 percent can be explained by sociology and psychology, the 99 percent, in all reasonableness, cannot.

The relevant conformistic ideas and attitudes of mind, the great fashions which will be compromises between vested interests and (manipulated) aspirations of majorities, from the old religions, irrational philosophies and immobilizing, 'here-and-now' art up to and including the current anti-intellectualistic 'educational

reform movement' in most Western countries, almost certainly penetrate many minds via psi-inductoric, 'totem' action, too.

Even more strongly, the Sartres, the Foucaults, the Illichs and their work are our totems (within certain groups), no less so than the crosses and rituals of the old religions, than our flags and popular songs, than our fashion dresses, Manchester United and Olympic sportsmen.

They are symbols of dominating mental attitudes, of a feeling of life, which they tend to transmit associatively - normally associatively and, as we saw, very probably psi-inductorically - to 'non-believers'.

And, therefore, it is as little to the point if one asks for the substantial meaning of all that Foucault pretends in Les mots et les choses, for new ideas in the writings of the average professor of philosophy or for a sense in nine tenths of the work of 'modern' poets, as it is to ask for the substantial contents of the American flag, of the robes of the priests or of the ceremonies with which Louis XIV put on his trousers. The meaning of the first-described works is in fact no other than that of the matters meant in the second series: to be symbol-association kernel, inductor, in both normal-psychological and paranormal sense, with the transmission, 'inducing' of feelings, attitudes of mind and ideas. Because of their culturally and religiously to some extent isolated position, Jews will be (have been) usually less accessible to the conforming tendencies emanating from many culturally institutionalized inductors: these symbols etc. speak (spoke) to them less whereas, further, their own ones, they being a small minority never could get such an exclusive action for them as those of the majority had it over those belonging to it. Does this also explain something of the disproportionate number of unconventional new ideas produced by Jews (Marx, Freud, Einstein, ...) and of the hatred which they, partly escaping from the collective manipulation, so frequently used to evoke? Does it also explain what we mentioned in the second section f.: could favorable events rather come to me via people who are less integrated into the unkindly disposed group mind?

Further it does not seem improbable that the resistance to a sound research of the paranormal phenomena can not be isolated from their role in the mechanisms via which the group exerts uncontrolled influences on its members. The taboo concerned on one side manifests itself as a resistance to the acknowledgment of the existence of the relevant phenomena and on the other side by making them to be considered as non-rational, not scientifically seizable.

### INTEGRATIVE PROCESSES AND SEXUALITY

From the foregoing it became very probable that the measure in which

something can function as an inductor strongly depends on the measure in which (positive) feelings, libido, are directed to it, that is, particularly aspirations, hope and sympathy. Especially for this reason flags, rituals and, e.g., God, too, are so much acting as (partly abstract) inductors.

From this, and equally from what has been observed in the first section in connection with b. and c., it becomes clear that especially sexuality might play an important part with inductorical transference. Then, we can expect in the first place that attractive individuals, on whom desires concentrate, may often be equally good integrative inductors as flags etc.

With the idea of the importance of sexuality in this respect also the more general observation of several parapsychologists is in agreement that the psi phenomena particularly present themselves in domains and situations where strong passions exist.

What strikes us now with the interferences of the group, collectivity, with the sex is that these interferences, that is, in particular the taboos, time and again used to and will prevent the sexual strivings from going straight to their target - Freud speaks strikingly of 'zielgehemmte' sexuality -, and within this scope surrounded, connected, them with a whole 'social hodge-podge', wherein the sex was 'wrapped up'. Above all sex was not allowed to become a 'purpose in itself', it had to be connected with all sorts of things, be 'sanctified' by them, be 'integrated'.

I.e., the incest taboo, found practically everywhere, that obliged one to look for a partner outside his own clan, (extensive) family, and most sexual taboos in general, compel the individual to 'engage more into the group', in which a partner now had (has) to be acquired more 'laboriously', within the scope of a more extensive social interaction process.

So far as the instinctive striving was shifted temporarily or more lastingly to the social environment and inductors active therein, a vigorous socialization process was fostered, with the benefits and the drawbacks (conformism) thereof: strong instincts were 'socially bound' because they became (were made) more socially dependent. Moreover, sexuality was (is) kept, by the taboos, in a chronic state of unsatisfiedness and excitement with very many, so that they continuously 'hoped for something which had to come from outside', which strengthened the psi-inductorical 'hold' of the outside world, of the group, on the individual in question. This, too, probably was (is) exactly the unconscious purpose of the sexual taboos, now.

Also particularly of social situations and environments with which sexual strivings are (perforce) strongly connected by the 'Zielgehemmtheit', of which protractedly and 'driven-up-intensely'

something is expected, hoped, e.g., the pleasure-seeking social life of (for the greater part sexually unsatisfied) youths, one can expect that it has a significant - socially conforming - psi-inductorical effect, which constitutes, then, an aggravation of the action of the taboos anyway, especially therefore the integrative one, too.

In this context, a personal experience can be of importance: whereas in direct sexual situations and with intimate conversations with partners I always feel (felt) wholly free and relaxed, as regards my opinions about sexuality always have been very liberal and I experience the erotical very consciously and as something beautiful, and also exactly know what I want, I nevertheless in the above-meant 'zielgehemmte' erotically charged group situations in the social sphere felt a discomfort, an oppression in that period of my life in which I, too, strongly expected, hoped for, erotic contacts from that sphere and, therefore, felt dependent on it. An oppression which seemed stronger to me than can normally be understood.

As an explanation it forces itself on me that because I felt particularly dependent on the group here and invested much aspiration and hope in a concrete group situation, I was psi-inductorically intensely confronted with what we called the group mind, with a local-situationbound 'condensation' thereof. The whole situation and sphere, and the social play and style of social intercourse which corresponded (and correspond) to an attitude of mind - that of the curbed, strongly dammed up but 'unstraightforward', 'unintentional' and little serious sex - functioned as an inductor which brought me, who associated libido with it, into direct contact with that with which my strong, conscious emotions and (therefore) serious attitude were and are in conflict, just sexually, too.

My 'unadjusted' strivings came into direct psychic collision with integrative repressing forces in a vital-instinctive domain, forces which tried to conform the spoil-sport or to press him down.

The psi component of my experience may be comparable to the discomfort from which paragnosts sometimes cannot withdraw while being in or having contact with a certain environment or (other) inductor.

## THE USE OF INTEGRATIVE CAPACITIES

The negative psi effects and their explanation indicate at the same time ways for a better positive use of the natural psi capacities, which we anticipated already at the end of the second section. So far as I feel that I can deduce from my own experiences and/or as it has to be expected after the foregoing discussions, especially

the following points are important here:

a) As inimical, sabotaging integrative complexes or forces emanating from unfriendly disposed and working via our own unconscious and that of others, get more hold on our experiences in proportion to our making inductorical contact with them: by giving attention and directing strivings and hope to association-kernels of them (situations, persons, objects and spheres), so this holds, too, for sympathetically disposed integrative complexes and forces. That is, by connecting our attention, our hope and our strivings strongly with what as to sphere or otherwise is logically or associatively related to what is sympathetic to us, 'we attract the good to us', so far as integrative forces exert influence in this respect, because so far we are integrated communicatively, in a context of cooperation, in a super-individual psychic complex which is kindly disposed to us and trendlike fosters certain events, among which coincidences in which we are concerned.

This seems to be the explanation for my experience that 'transference' of strivings and hope to the sphere of purity and sublimity which we may call 'the kingdom of God' tends to have a favorable effect.

b) The psi capacities seem to be working to a considerable measure from a deeper, half unconscious or 'pre-conscious' level of the psyche. In harmony therewith was my experience that, besides the transference of energy as meant in a., the transference of strivings and hope to that deeper level, to a 'solid-protected' and sympathetic pre-conscious, both worked positively on the experiences of life and also on the appearance of psi phenomena such as proscopic dreams.

That what is meant in a. and b. is, for the rest, closely related mutually. A feeling of strong association with the cosmic, with a deeper level of an all-encompassing mind, constitutes a common basis. The detachment of strivings and hope from the 'worldly complex', from the inductors which connect us therewith, constitutes an essential part of the transference of both a. and b., too.

Such a detachment from the worldly and the group mind which also integrates the forces therein, therefore seems to be important not only for a nonconformist with respect to whom the group mind is unkindly disposed but, to a lesser extent, anyhow.

A support for the idea that 'transference' works favorably on the psi capacities constitutes the repeated observation of researchers that strong conscious aspiring to positive results has a negative effect with parapsychological experiments (10): one can imagine that, by this, very striving-energy is withdrawn from the decisive 'deeper level'.

c) Frustrations, failures, and also the continuous thinking thereof in the shape of worrying and anxiety according to my experience, too,

seem to have the propensity to attract more reverses. One may compare here the saying: 'An accident never comes alone' and the well-known belief that fear, as it were, attracts danger. Therefore, a close and prolonged psychic and especially emotional contact with frustrations, i.e. worrying, had better be avoided as much as possible.

Worrying and continuously driven up, frustrated strivings, moreover, have the tendency to withdraw energy from the deeper level mentioned and, therefore, from the psi capacities. It is probably in this connection that there may be truth in the advice of Lao-tse: you lessen suffering 'by stepping aside', by abandoning your expectations about how it would have to become. "And in the 'fruitful void' so formed the solution flows in". What then might happen indeed is that the striving-energy is transferred to the psi level and brings about a solution via that way, which 'flows in'.

What convinced me in particular of the effect of the detachment mentioned in the foregoing is that the favorable effect of different forms of it already struck me long before I realized that all of them essentially amount to the same thing. E.g., the 'holy indignation' mentioned in the second section, a making the mind 'pure and void', an attitude of 'I am calmly steering in the depth' (that is, on the deeper level mentioned), etc.

As far as my experience goes, the most positively acting general attitude seems to be this: you direct your attention continuously rather consciously to the purest, 'holiest' spirit or atmosphere you can imagine, you feel yourself strongly connected with it and you make your expectation of and hope for happiness or a way out from problems (more than the striving for them, with which 'fatigue' or spasmodicity may start appearing in the long run) be unparticularized in it: from this atmosphere you expect and hope for the good. With every temptation to connect your hope or striving with other things which, by associations or otherwise, are less sympathetical, you hold out to yourself: 'From that direction there is nothing to be expected for me'. By means of this attitude and direction of energy one may 'mind' the good inductorically from a 'collective unconscious psychism', somewhat similarly as one can remind something forgotten by thinking of what is associatively related to it in the right emotional tone. (You may ask yourself, further, whether or not the fact that, especially by negative experiences of life, I was brought to assuming the attitude of mind described here, has to be seen primarily in the light of 'giving an efficacious answer to inimical activities from a group mind . It might in the first place have a meaning within the scope of an evolution process in which we all take part and with

which resistances or the evil might also perform a function as an incentive, challenge, or sometimes also - compare pain - as a warning that, somewhere, we have to set about in another way, through which we become better or stronger.)

An opposite attitude: stubbornly committing the libido to life, 'pressing it against it', against the worldly situation, equally had an unfavorable effect, probably both by giving inductorical hold to the unsympathetical (the group mind) and by withdrawing energy from the deeper psi level, which two causes might constitute the main explanation for psi-missing.

An important fact to which especially my experiences with dreams point is that the way in which inductorical contacts which are strongly determined by one's own attitude of mind influence our action to a great extent is such that, at the border between unconscious and conscious, certain psi and other impressions are selectively let through or stopped, according to the association complex which has most influence in our mind. E.g., I had some precognitive and also warning dreams mainly after days of successfully 'maintaining' the communion with the cosmic mentioned or after the 'great indignation' mentioned. Then data were let through which otherwise might have been checked by the (inductorical) influence of negative forces. This way one can imagine that also in the waking life certain impulses and impressions are let through or checked selectively under the influence of dominating sympathetic or inimical forces with which we have inductorical contact, which may be of great influence on our success in life. This then constitutes one of the means via which integrative forces co-determine not only our dreams but, in a (therefore) not wholly unsimilar way, our real experiences in life, too. A determination which constitutes a central subject of this paper.

In my experiences it has also been striking that the oppression in the pleasure-seeking social life sphere mentioned in the fifth section disappeared almost immediately with the application of the 'transference' of the libido, mental energy, to the deeper level, which seems to indicate that the negative inductors lost their hold, then.

For the rest, the transference, especially 'calmly steering in the depth', is usually accompanied with me by a remarkable corporal reaction: the coming up of a special feeling in the face which after a short time also results in looking better. The reaction in question also clearly relates to my erotics. One possibility is that the relevant feeling is a purely normal reaction to a lessening of vegetative tension or anxiety, which lessening then, in turn, is a (normal) consequence of the changed attitude of

mind and, as another consequence, has a more freely functioning of the psi capacities.

What is said in the foregoing about the following of 'the good way', and in order to explain the effect thereof, in many respects amounts to a more scientific approach and explanation of what has been felt intuitively and taught already by many great religions and wise men. Yes, is wisdom not to a high degree: the intuitive feeling of the action of important integrative laws, with which (therefore) also correct moral insights and precepts might co-correspond? Particularly pronouncements such as: "First seek the kingdom of God and its justice, and all these things shall be added to you" and "The kingdom of God is within you" might rest on 'nothing but' such a pre-scientific intuition: who feels strongly connected with 'the kingdom of God' within him, gets 'all these things added to him'.

In terms of energy- and inductor-action a directing oneself strongly to the 'kingdom of God', or to 'God', also prayer, therefore, means 'ordinarily': seeking intensely contact with favorable, sympathetic inductors and, especially, also with the deeper collective level: the super-organism that beneath all projections and group minds might constitute the scientific basis of what will be denoted by 'God'.

## FINAL REMARKS

It seems to be possible to test the kernel of the theory exposed here experimentally. In order to do so one would have to use with a group of subjects a number of emotionally strongly charged 'totems', inductors, with which they come frequently into contact in the experimental period. One has to investigate then to what extent certain preferences and dislikes of, in the beginning, e.g. 75 percent of the subjects would spread quantitatively after a certain time. The experiment will have to be repeated with not affectively charged inductors. The number of participants will have to be large and the duration of the experiment will have to be long in order to imitate reality to some measure.

In the second place the amount of success would have to be measured with the execution of various social and other tasks whereby human interactions and chance situations preferably play a part. That success would then have to be compared with respect to persons who either were conformed or not to the preferences and aversions of the great majority, who did or did not harmonize, therefore, with a group mind which possibly formed itself (via the inductors).

Another relevant experiment will be a testing of ESP and PK

performances of persons who, spontaneously or wilfully, are in one of the two contrasting moods: the 'good' or the 'bad' discussed in the foregoing.

In what precedes the conceptions telepathy, association, inductor action and group mind were very central. However, we have to reckon with the possibility that these are largely only preliminary images, names, which relate to processes which in reality proceed otherwise than these names suggest. An alternative conception of psi action which is brought to the front by several authors at this moment (11) starts from the idea that observation or, more generally, experience of man sometimes is determined more directly by his own psyche than has been thought up to now, and that, moreover, this observation as an event can cast its shadows before itself, which, then, constitutes a second psi aspect of the occurrence. Psychokinesis (PK) such as the influencing of the way in which dice fall and striking coincidences would then be caused by the fact that the one who observes or experiences the particular configuration of the number of spots or of events in general, co-determines that experience by his will or psychic situation, and with this also the preceding causes outside of him which led to it. One speaks then of a retroactive effect.

If at the same time more observers observe the same thing, their wills and/or PK activities would be 'coupled', which particularly means that a common observation value of the related thing or variable has to appear for all.

It will be clear that with this approach our previous dissertation would actually change only little. 'Group minds' now become groups of individuals who - by their collective observing or experiencing - may collectively influence the 'falling of the dice': the relevant events and coincidences, via mutually cooperating or opposite PK. Inductors and super-individual association phenomena now become factors which can play an important part with the 'coupling' of the wills and/or PK activities of different individuals (as appears already from the successful use paragnosts make of them), a coupling in terms of which also telepathic 'signals' have to be seen now, whereas the whole of the phenomena discussed in this paper and particularly the effecting of striking coincidences get a more PK-like character.

Will, striving, which we stressed especially, also in Walker's conception plays a central role with that PK, and, therefore, also with the coincidences and general integrative influencing of the (inter-) human occurrence.

If I strongly associate my striving with a sympathetic association complex, experience it in the atmosphere of that complex, then, translated into the PK conception described here, that striving may

be coupled with cooperating forces, strivings, outside myself. If I associate the striving strongly with an unsympathetic complex then it may be coupled to counteracting forces with all consequences of it with the 'falling of the dice'.

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