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DIRECT PERCEPTION OF REMOTE GEOGRAPHICAL LOCATIONS

by

Harold E. Puthoff and Russel! Targ

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DIRECT PERCEPTION OF REMOTE GEOGRAPHICAL LOCATIONS

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ABSTRACT

For the past five years we have been in-
westigating aspects of human perception that
appear to fall outside the range of well-under-~
stood perceptual/processing capabilities, Of
particular interest is a human information-
accessing capability that we call ?remote sens?
ing." This phenomenon pertains to the ability
of certain individuals to access and describe,
by means of mental processes, information
sources blocked from ordinary perception (for
example by distance or shielding) and believed
to be secure against such access, In particu-
lar, the phenomenon we have investigated most
extensively is the ability of a subject to view
remote geographical locations up to several
thousand km distant from his physical location,

given only a known person on whom to target,

We have recently carried out coast-to-coast experiments using a computer network to interface with individuals whose remote perceptual abilities have been developed sufficiently to allow them to describe--often in great detail--geographical or technical material such as puildings, roads, and natural formations.

Our accumulated data indicate that both specially selected and unselected persons can be assisted in developing remote perceptual abilities up to a level of useful information transfer, Further, the extent of physical distance separating the subject from the target site up to transcontinental distances does not appear to significantly affect the accuracy of the perception.

INTRODUCTION

In over 70 laboratory experiments that now include work with more than a dozen subjects, we have investigated an often-reported human perceptual ability that has heretofore not been widely investigated in the laboratory, This

ability, brought to our attention by a subject, Mr, Ingo Swann, we term "remote sensing." It is an ability by which human subjects perceive, and describe by word and drawing, distant seenes and activities blocked from ordinary perception, In these experiments, subjects have been able to describe with equal accuracy scenes at both local sites (that is, within a few miles) and those at transcontinental distances.

As observed in the laboratory, the basic Phenomenon appears to cover a range of subjective experiences variously referred to in the literature as autoscopy (in the medical literature); exteriorization or disassociation

(psychological literature); simple clairvoyance, traveling clairvoyance, or out-of-body experience (parapsychological literature); or astral projection (occult literature), We choose the term ?remote sensing" as a neutral descriptive term free from prior associations and bias as to mechanisms,

The need for : supportive setting to overcome prevailing societal prejudices against such remote sensing has been provided within the confines of the Electronics and Bioengineering Laboratory and the Radio Physics Laboratory at Stanford Research Institute (SRI), Here, throughout our research spanning a five-year period, we have worked with new and un=-trained subjects so as to avoid reliance on the availability of a very limited number of spe~-cial subjects, Remote perceptual abilities in several individuals have now been developed sufficiently to allow them to describe--often in considerable detail--geographical or technical material such as buildings, roads, and real-time activities,

Since the initial publication of our investigations of this remarkable phenomenon,? ? four successful replication experiments have been performed in other laboratories across the country .477 In addition, we have learned through private communications of several unpublished studies of other successful experiments in paranormal functioning of this type.

In this paper we describe the experimental

protocol used to carry out the research and the formal judging procedure used to quantify the results, In addition, we detail recent experiments in coast-to-coast remote viewing that have yielded results similar to those obtained in the initial experiments using relatively local target sites, Finally, as a step toward achieving our research aim of using the experimental data base to deduce relevant physical principles and laws governing paranormal or psi functioning, we examine some physical models potentially applicable to remote perception,

EXPERIMENTAL APPROACH

Description of the Protocol (Local Targets)

The general protocol is
ject with an experimenter at
arranged time to obtain from
scription of an undisclosed, remote site being visited by a target team, In each of the experiments, there is an SRI experimenter on the target demarcation team at the remote location

to closet a sub-
SRI and at a pre-

the subject a de-

os caus whee sive ishseru a, tin sage Si aN sae EE en MT ati ini

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CONCRETE BLOCK

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PICNIC AREA

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(a) City map of target location

FIGURE 1

that is chosen in a double-blind fashion out-
lined below,

An outbound experimenter is assigned a
target location by an independent experimenter
who has generated a list of targets located
within a 30-minute driving time from SRI, and
who accesses this list by a randomization pro-
cedure, The target pool consists of more than

100 target locations chosen from a target-rich environment, The target location selected is kept blind to both the subject and experimenter closeted at SRI,

In detail: To begin the experiment, a.sub-

ject is closeted with an experimenter at SRI to wait 30 minutes before beginning a narrative description of an undisclosed remote location that will be the target for the experiment, A second experimenter, accompanied by other members of a target demarcation team, then obtains sealed traveling orders from a monitor who has previously prepared and randomized a set of such orders, After leaving SRI by automobile, the target demarcation team opens the traveling orders and proceeds directly to the target without any communication with the subject or experimenter remaining at SRI, The experimenter remaining with the subject in the SRI laboratory is kept ignorant of both the particular target and the target pool so as to eliminate the possibility of cueing (overt or subliminal)

and to allow him freedom in questioning the subject for clarification of his descriptions, The

target demarcation team remains at the target

site for a prearranged 15-minute period follow-
ing the 30 minutes alloted for travel, During
the cbscrvation period, the experimenter in the

(b) Drawing by Price

SWIMMING POOL COMPLEX AS REMOTE VIEWING TARGET

lab tape-records the subject's remote viewing
impressions of the target site and collects ar
drawings made by the subject, After the targe
demarcation team returns to SRI, the impressic
obtained from the subject are compared with tt
actual observations of the team, Finally,
following the experiment, the subject is taker
to the site so that he may obtain direct
feedback,

Initial Experimental Series with a Subject
Experienced in Remote Viewing

Our first subject in a formal series of
experiments to investigate the remote viewing
function was Mr, Pat Price, a former Califor

police commissioner and city councilman, who participated in nine experiments, Mr, Price came to our experiments with a reported histo: of spontaneous remote viewing experiences, IL general, Price's ability in our experiments t: describe correctly buildings, docks, roads, gardens, and the like, including structural materials, color, ambience, and activity--som times in great detail--indicated the function of a remote perceptual ability. A Hoover Tow target, for example, was recognized and cor- rectly named, Nonetheless, Price's descripti generally contained inaccuracies as well as c rect statements, A typical example is indica by his drawing shown in Figure 1 in which he correctly described a park-like area containi two pools of water: one rectangular, 60 X 89 f£t (actual dimensions 75 X 100 ft); the other circular, diameter 120 ft (actual diameter 11 ft), As can be seen from his drawing, he als included some elements, such as the tanks sho in the upper right, that are not present at t

dca ell pe anal it int MS ana

target site, We also note an apparent left-
right reversal, often observed in paranormal

percoption experiments,

Further, he incorrectly indicated the
function of the site as water purification
rather than recreational swimming. We often
observe essentially correct descriptions of
basic clements and patterns coupled with incom~
plete or erroneous analysis of function, ?This
theme emerged as a throad which continued
throughout our work and eventually led to a
breakthrough with regard to an understanding of
the interrelationship between paranormal per-~
ception and cerebral functioning, namely: that
paranormal functioning may involve spcecializa-
tion characteristic of the brain's right. homi-
sphere, which predominates in spatial and other
holistic processing, in contrast to the left
hemisphere which predominates in verbal and
other analytical functioning ,°~

Judging of Results

To obtain a numerical evaluation of the accuracy of the remote viewing experiment, the experimental results were subjected to independent judging on a blind basis by an SRI research analyst not otherwise associated with the research, Price's response packets, which contained the nine typed, unedited transcripts of the tape-recorded narratives and associated drawings, were unlabeled and presented in random order, Working alone, the analyst visited each target location in-turn and in a blind fashion rated Price's descriptions on a scale 1 to 9 (best to worst match), The statistic of interest is the sum of ranks assigned to the target-associated transcripts, lower values indicating better matches, For nine targets, the sum of ranks could range from nine (for perfect matching) to eighty-one, The technique for calculating the probability that a given sum of ranks s or less will occur by chance is given in Reference 2, The results of the judging, shown in Table 1, included seven direct hits out of the nine, The overall result was statistically significant at p = 2.9 x10 °. Table 1 also indicates the various types of targets used in this series, Further, in experiments 3, 4, and 6-9, the subject was secured in a

double-walled copper screen Faraday cage, which provides 120-dB attenuation for plane-wave radio-frequency radiation over the range of 15 kHz to 1 GHz, The results of rank-order judging indicate that the use of such shielding does not prevent high-quality descriptions from being obtained,

Replication Series with a Subject Inexperienced in Remote Viewing

Having completed this initial series of . experiments with Price, we concluded that i

Table 1

DISTRIBUTION OF RANKINGS ASSIGNED TO TRANSCRIPTS ASSOCIATED WITH EACH TARGET LOCATION FOR EXPERIENCED SUBJECT PRICE

Rank ©

Associat«

Transcriy

Distance

Target Location (kn)

Hoover Tower, Stanford

Baylands Nature

Preserve, Palo Alto 1

Radio telescope,

Portola Valley 1

Marina, Redwood City

Bridge toll plaza,

Fremont 6

Drive-in theatre,

Palo Alto 1

Arts and Crafts Plaza,

Menlo Park 1

Catholic Church,

Portola Valley 3

Swimming pool complex,

Palo Alto 1

Total sum of ranks

(p=2 9X10"

remote viewing was both a real and a robust phenomenon, Our next task was to try to find out how widely distributed the ability was in the general population, We began with the following replication experiment,

The subject for this experiment was Mrs, Hella Hammid, a gifted professional photographer, She was selected for this series on th basis of her good performance as a percipient in an earlier EEG experiment designed to meas physiological response to remote strobelight stimuli, a hypothesized screening procedure f remote viewing. Outside of that interaction, she had had no previous experience with appar paranormal functioning,

At the time we began working with Mrs, Hammid, she had no strong feelings about the likelihood of her ability to succeed in t task, This was in contrast to both Ingo Swan who suggested these experiments and who had

come to our laboratory fresh from an apparent

successful series of similar experiments with

Dr. Karlis Osis at the American Society for

Psychical Research (ASPR) in New York! ana

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Mi ta ae aid ak Sib el a Ras BES Linh So ise? +

ace

Pedestrian Overpass Target

Cc

Coe

FIGURE 2

SUBJECT HAMMID DRAWING, DESCRIBED AS ?SOME KIND OF DIAGONAL TROUGH UP IN THE AIR?

Pat Price, the first subject in our formal series of experiments, who felt that he used his remote viewing ability in his everyday life.

We observed in working with Price that i remote viewing structure and form tended to b correct even when interpretation was incorrec We therefore found it an advantage that Mrs, Hammid's artistic background enabled her

to draw and describe visual images that she could not identify in any cognitive or analyt sense, When the target demarcation team went to a pedestrian overpass target location, for example, the subject said that she saw "a kin of diagonal trough up in the air," which she indicated in the upper part of her drawing in Figure 2, She further explained that "If you stand where they are standing you will see something like this," indicating the nested squares at the bottom of Figure 2, As can be

In working with an inexperienced subject, we must take into account the fact that many people are influenced to a large degree by their environment and by public scrutiny when it comes to activities generally considered to be impos= sible, A reluctance to cope with negative feed- back from society often inhibits individuals from exploring a potential for paranormal per- ception, Therefore, in addition to maintaining Scientific rigor, one of our primary tasks as researchers is to provide an environment that lends protective support for a subject to pur-

Sue such exploration, With a new subject, we also stress the nonuniqueness of the ability

because our experience indicates that paranor-
mal functioning is a latent ability that all
subjects can demonstrate to some degree,

seen from the photograph of the target locati
as shown in Figure 2, a judge standing where
indicated would have a view closely resemblin
what she had drawn, We emphasize, however, t
judges did not have access to our photographs

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the site, used here for illustrative purposos only; rather, thoy proceeded to each of the target locations according to a list,

As in the original series with Price, the results of this ninc-experiment series were submitted for independent judging on a blind basis by an SRI research analyst not otherwise associated with the rescarch, According to the judging proccdure previously outlined in the section, "Judging of Results," the judge ranked each target location on a scale of 1 to 9 (best to worst match) on the basis of the narratives and drawings submitted by the subject. The sum of ranks assigned to the target-associated transcripts was statistically significant at p=1,8X 1075, This included five direct hits and four second ranks as shown in Table 2 along with the locations of the nine experiments in this set,

Table 2

DISTRIBUTION OF RANKINGS ASSIGNED TO TRANSCRIPTS ASSOCIATED WITH EACH TARGET

LOCATION FOR LEARNER SUBJECT HAMMID

Rank of

Associated

Transcript

Distance

(km)

Target Location

Methodist Church,

Palo Alto

Ness Auditoriun,

Menlo Park

Merry-go-round,

Palo Alto

Parking garage,

Mountain View

SRI International

Courtyard, Menlo Park

Bicycle shed,

Menlo Park

Railroad trestle

bridge, Palo Alto

Pumpkin patch,

Menlo Park

Pedestrian overpass,

Palo Alto

Total sum of ranks

(p=1.8x107°)

In comparing the results of the Hammid and Price experiments, we observe a difference in the subjects' styles that evidently affected the pattern of results, The descriptions from Price were usually more detailed than those of Hammid

°

and thus led to more first-place matehes--thai is, direct hits in the rank order Judging, At the same time, his striving for detail producc erroncous analytical interpretations that re-~

sulted in two distinct mismatches, On tho other hand, the more restrained narratives of Mrs, Hammid resulted in fewer first-place matches, but none fell below second place, © a comparison of results docs not indicate that one subject necessarily has more paranormal pe ception than the other, but rather shows the effects in this type of judging procedure due a difference in tyle,

Experiments with Unselected Subjects

After more than a year of following the experimental protocol described above and observing that even inexperienced subjects obtained results better than expected, we began series of experiments to explore further whether individuals other than so-called "psychics" could demonstrate the remote viewing ability, To test this idea, we initiated an extensive series of experiments using unselec: ed subjects and local targets in the Bay Area, We had no particular reason to believe that these additional subjects possessed paranorma: perceptual ability.

These experiments served a twofold pur-

pose, First they provided an opportunity to obtain data that indicate the level of proficiency that can be expected from unselected volunteers. Second, they served to dispel co: cerns about the possibility of deception, Fo. example, many scientists from the government and elsewhere have visited our laboratory to decide whether their particular departmeu.s should be concerned with paranormal research, Their requests generally focus on a desire to "see something psychic," and we had been willing to demonstrate the remote. viewing protoco with one of our subjects. However, when an individual observes a successful experiment demonstrated with another person as subject, inevitably occurs to him that perhaps chicane is somehow involved, We have found that the most effective way to settle this issue is to have the doubter become the subject, thereby providing him with personal experience as a basis for evaluating our experimental protocc and reported results, Consequently, we have discontinued demonstration experiments, Instead, we ask the visitor to become a subject so that he can personally evaluate what he experiences and sees, After the experiment, he is then taken to the target site where he car

determine firsthand if it corresponds to whai
he has visualized during the experiment, We
have found that the actual experience as a si
ject of successful remote viewing is by far
more instructive than observation of what soz
one else has done, The following results

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FIGURE 3

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STANFORD UNIVERSITY, INNER QUADRANGLE -? TARGET; SKETCHES PRODUCED BY

SUBJECT INEXPERIENCED AT REMOTE VIEWING

obtained with the last two visitors who agreed
to act as subjects provide specific examples,

The first was an electrical engineer who
was interested in evaluating our work, We ex-
plained to him that the only demonstration we
were prepared to offer was the experience that
he himself might have in being a remote viewing
subject,

His first target location (determined by the standard random protocol) turned out to be a lecale known as the Baylands Nature Preserve, Our visitor described and drew a long wooden walkway and indicated the presence of extensive gardens, an accurate depiction of the target site, However, he also described seeing a building, that is not at the target site, This sort of superposition of erroneous imagery on otherwise accurate descriptions is a common occurrence and is the principal source of noise to be overcome if remote viewing is to become a useful tool,

The next day we carried out a second ex~ periment. with this visitor, This time the randomly~determined target was the inner quadrang: at Stanford University, Our subject described courtyard and made the two drawings shown in Figure 3, Almost every element of his drawing: corresponds to the actual arrangement at the location of the remote experimenters. These r sponses are among the most accurate and detail: that we have ever seen, This target had never

been used before, and the visitor indicated th
he had never been to the Stanford Campus befor
nor had he ever seen a photograph of this
location,

A second result, typical of what we have
come to expect from the remote viewing protoco
was obtained with our most recent visitor/volu
teer, a physics professor who was skeptical of
our reported results. This man had been lectu
ing on the West Coast and came to SRI to learn
firsthand of our research, In addition to hea
ing our description of the protocol, he was al
invited to participate as the subject in an ex
periment so that he could personally evaluate

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the experimental aspects of the remote viowing channel,

The target chosen by random protocol was White Plaza at Stanford University, the second time in four years that this particular site came up for experimental use, The subject gave an excellent description of the plaza and the surrounding buildings and produced the drawing shown in Figure 4, In addition, he also correctly described the motion of the outbound experimenter who circled the fountain in a clock~wise direction as shown in the subject's drawing,

The results obtained with these two men are not isolated examples selected from many unsuc~cessful trials, Rather, they are simply the most recent examples of visitor first-time cases, and are typical of what we have come to expect from any serious attempt at remote

viewing,

LONG-DISTANCE EXPERIMENTS WITH TELECONFERENCING

ELEC ON EERENCING

After establishing a data base of over 50 experiments with local targets (sites within a few miles), we undertook an experimental series designed to determine whether an increase in subject-target separation to transcontinental distances would degrade the quality or accuracy of perception, As a secondary goal, we were interested in the real-time data rate; e.g., determining the extent to which a remote viewing subject can track the real-time activities and movements of a known individual in a distant city, The only communication between ?the outbound experimenter (e.g., in New York City) and a subject in the SRI Laboratory (Menlo Park, California) was by means of the ARPA computer net, Access to the computer by the traveling experimenter was by means of a portable terminal carried from point to point,

Following are the results obtained in this Series, which consists of five experiments to date,

New York-California Experiments

.

The protocol for this experiment allowed

the subject at SRI in California and the experi-?

menter in New York City to communicate via the conversational TALK mode available on the ARPA computer net, The subject and the experimenter at SRI agreed (via computer teleconferencing) to begin an experiment one-half hour later, The burpose of the computer in this experiment was to provide time- and date-stamped permanent records of all communications between the various parties involved in the experiment, These data can be read in real time by any authorized person entering the SRI-AI Tenex (MSG) system,

\|7 |

FIGURE 4 FIRST EXPERIMENT WITH VISITING

PHYSICS PROFESSOR: ?THERE ARE

WIDE STEPS RUNNING THE ENTIRE

WIDTH OF THE STRUCTURE.... | SEE

AN OVAL POOL IN FRONT OF THE

STEPS AS | MOVE BACK... AND

THERE COULD BE A SMALL

STRUCTURE IN THE MIDDLE OF IT

LIKE A CROSS-SHAPED OBJECT....

ON THE GROUND | STILL SEE SOM

KIND OF QUADRILATERAL.?

After logging off the computer, the out-

bound experimenter would use a random number

generator to determine which of six locations

in New York City would constitute the target t¢

be visited in this experiment, Neither the sux

ject nor the experimenter at SRI knew the con-

tents of the target list that was compiled just

before the experiment, Having selected a targ:

location by the random protocol, the experimen!

er would proceed directly to the site and remai

there for fifteen minutes,

One-half hour after breaking computer

links, the subject would begin to type impres-

=T=

HA haat sh RN a nat alan SS SAN all sr at A Oa cy MSU aig: Leith ath oat hg

oa a ta ica he dk iti esd si enacts nn ie ai iy nisin iin iam. AiR as A

stens into a special computer file established
ger this purpose, |

When the New York City exporimenter re-
turned to his hotel from his target site, he

would make use of a limited-access file to enter,

his description of the place he actually visit-
ed, He would then return to the exccutive level
of the computer, and await the appearance of the
SRI experimenters who could then (and only then)
link terminals, At that time both files would
be printed out on both terminals and the subject
and the experimenter would each learn what the
other had written,

Two subjects, both in California, partici-
pated simultaneously in this experiment with
the first of two New York City targets, The
first of the two New York City targets was
Grant's Tomb, Both subjects independently pro-
vided computer-stored records of their impres-

sions, and one made the sketch shown in Figure 5, (The five possible targets in addition to Grant's Tomb were a railroad bridge, the 20-story New York University law library, the fountain in Washington Square Park, the Columbia University subway station, and the 72nd Street boat basin, The targets were chosen to be dissimilar, and thus differentiable, by potential judges.)

The first subject, an SRI systems analyst, said in his opening paragraph: "Outdoors, large open area, standing on and then off asphalt (rough material), dark for a path, A white building, like a ticket booth, Wooden structure, is white in color, and has an arched look about it, There is a large shade tree close to Kuss (outbound experimenter) ."

The second subject, a medical student closeted in a separate SRI location, began with: "I thought of a high place with a view, I saw a tree on your left, A brick plaza seemed to be in front of a building you were entering, I could not clearly identify the activity, A vestaurant? A museum? A bookstore? You had coins in the palm of your hand, maybe giving

Some to Nicky (son of outbound experimenter) ,"

The coins were in fact used to purchase the
Postcard from which Figure 5 was made, and they
Were given to the experimenter's son who made
the purchase, Both subjects then went on for
=n additional paragraph to describe details of
the activities they imagined to be going on in-
Side the building they saw, details that were
partly correct, partly incorrect,

In the second experiment, the target, again
zhosen by random protocol, was the fountain in
Washington Square Park, One subject partici-
pated, She produced an exceptionally accurate
transcript, The photos and the subject's draw-
ing of the fountain are shown in Figure 6, The

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if

?

Grant?s Tomb Target in New York City

Faowt Vig,

FIGURE 5 COAST-TO-COAST REMOTE VIEWING

EXPERIMENT. SUBJECT. DESCRIBED

?OUTDOORS, LARGE OPEN AREA...

SHADE TREES... WHITE BUILDING

WITH ARCHES.?

subject began her printout with the following:
"The first image I got at about the first minut
was of a cement depression-<as if a dry fountai
with a cement post in the center or inside,
There seemed to be pigeons off to the right,
flying around the surface out of the depres?
sion . . . At one point I thought you were open
ing a cellophane bag . . ." (The experimenter
had in fact bought ice cream during the experi-~
mental period,) "There was also a rectangular
wooden frame, a window frame, but I wasn't sure
if it was on a building, or a similar structure
with a different purpose." (A possible corre-
lation from a functional viewpoint to the Wash-
ington Square Arch through which the outbound
experimenters viewed the fountain toward the er
of the experimental period.) "All in all I

thought you were at Riverside Park , , ," (In-

correct analysis.) An SRI scientist, familiar

? Subject?s Perception was of a ?Cement Depression ?
as if a Dry Fountain ? with a Cement Post in the
Center or Inside.?

FIGURE 6

SQUARE IN NEW YORK CITY

with the New York City area but blind to the target, did, however, identify the target correctly on reading the twenty lines of printout as it emerged from the computer terminal,

As an example of the style of narrative generated by a subject during a computer teleconferencing experiment, we include the entire unedited computer-logged text of the Washington Square experiment below (Figure 7),

These teleconferencing experiments provide an elegant demonstration of the utility of the teleconferencing process as a secure data recording system useful in real-time monitoring of long-distance remote viewing experiments,

In a more detailed tape recording she made after the experiment, but before any feedback, she described "cement steps going into the depression, like a stadium, and the rounded edge of the top of the depression as you go up to ground level," These descriptions not only are correct but also show remarkable detail,

COAST-TO-COAST REMOTE VIEWING

EXPERIMENT WITH TARGET AT WASHINGTON

New York-Ohio

A third long-distance remote viewing experiment was carried out under the control of an independent, skeptical scientist, In this case both SRI experimenters visiting in Ohio agreed to take part in a remote viewing experiment in which our host would select the target.

Under the observation of our challenger, ° telephoned one of our subjects, Hella Hammid, : New York City and obtained her agreement to participate in a long-distance remote viewing experiment, She was told only that we were located somewhere between New York City and ow

California laboratory and that shortly we woul:
be taken to a target that we would like her to
describe, The time for the experiment was set
for 2:00 PM EDT, We also agreed to call her
again at 3:00 PM EDT to obtain her impressions
and to give her our feedback as to the actual
target,

The scientist took us directly to Spring-
field, Ohio, to the Ohio Caverns that he had
chosen as the target location (see Figure 8).

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Date! 6 JUL 1976 1354-PDT

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Supgect? SUSANS REPORT PART 2 NYC EXP

THE FIRST IMAGE I GOT AT ABOUT THE FIRST MINUTE WAS OF A CEMENT
DEPRESSION ~ AS IF A DRY FOUMRTAIN - WITH A CEMENT POST IN THE
CENTER OF INSIDE . THERE SEEMED To PE PIGEONS OFF TO THE RIGHT»
FLYING ARQJNDTHE SURFACE QUT OF THE DEPRESSION. THEN I SAW AS
IF IFIF IN THE DISTANCE A REAL? STADIUM WITH GRASS IN THE
CENTER AND PERHAPS STADIUM LIGHTS. OTHER IMAGES WERE AROW

OF HOUSES?APICKET FENCE - SOME VERTICAL UNITS WITH JAGGED TOPS.
THEN A FLUTED?SROOVED VERTICAL COLUMN» BUT I COULDN?T SENSE WAHT

IT WA RELATED TO. AGAIN YOU WERE IN A DEPRESSED AREA WITH CEMENT SIDESs° LOOKING OUT ONTO THE SURFACE OUTSIDE. THE CEMENT SIDES ARE NOT STRAIGHT» BUT SLOPING: ALMDST S-SHAPRD. ALSO A CLEAR FEELING OF THE HEAYY's WORN METAL BAR ON THE TOP OF TYPICAL NYC OR ANYCITY FENCES. THERE DIDN?T SEEM TO BE ANYTHING REALLY SPECIAL INSIDEs JUST A SEPARATION BETWEEN TEWO TWO SIMILAR AREAS. AT ONE POINT: I THOUGHT YOU WERE OPENING A CELLOPHANE BAG AND LATER I SENSED YoU FEEDING POPCORN - TO PIGEONS. THERE WAS ALSO A RECTANGULAR WOODEN FRAME» A WINDOW FRAME» BUT I WASN?T SURE IF IT WAS ON A BUILDING: OR A

SIMILAR STRUCTURE WITH A DIFFERENT PURPOSE. ALL IN ALL» I THOUGHT YOU WERE IN RIVERSIDE PARK NEAR A TRACK AND PLAY AREA> OCCASIONALLY LOOKING UP AT THE "ROCK AND LEAF? CLIFFS LEADING UP TO THE DRIVE. AFTER I HAD THOUGHT THAT AND FIT IT IN T

WITH THE IMAGES RECEIVED SO FARs IT KIND DF STUCK» AND I POSSIBLY GENERATED MORE PARK SCENES. THE STADIUM ?FOUN

TAIN IMAGES WERE THE FIRST AND THUS THE LEAST BJIASED AS TO PARK MEMORIES. <I SURE DO LIKR THE TLELETYPE. IT CAN BECOME

AN OBSESSIVE PASTIME, I SEED.

THAT WAS MESSAGE 6

FIGURE 7 -COMPUTER FILE PRINTOUT. CALIFORNIA-NEW YORK LONG

DISTANCE REMOTE VIEWING, TARGET: WASHINGTON

SQUARE (NYC).

We .entered the grounds through an entrance arch,

that opens onto an enormous expanse of lawn,

perhaps twenty acres, The caves are located at

a depth of © 150 ft and are entered through a

Small building having a long flight of steep

stairs, Once underground, we walked through a

maze of rock-lined tunnels that lead eventually

into a series of rooms lined with calcite sta-

lagtites and stalagmites, frosty white and

beige crystals formed like icicles, The entire

cavern is illuminated by small electric light

bulbs attached to the walls, After a forty-five

ar

minute walk, we exited the caves through a large h ? 4

metal door giving access to a square cross- be!

sectional shaft with stairs leading to the ; let 0

surface, iS ict SE a ade aaa

Following the experimental period, the FIGURE 8 OHIO CAVES: DESCRIBED BY

scientist observer called the subject in New SUBJECT IN NEW YORK AS,

York, forty-five minutes after we left the ?UNDERGROUND CAVES OR MINES.

caves, The opening statements of the subject's DEEP SHAFTS... DARKER, COOL,

transcript as dictated over the phone and posted

MOIST EARTH-SMELLING PASSAGES.

to tkc SRI experimenters is as follows:

~10~

SO RTT RRR IR STITT RRR SAORI RTE Ps

ah lh hs gh Ocha A ak RS AN No iy nn piu etc peace sepnaic eh

e

"1:50 PM before starting--

Flat somi-industrial countryside with
mountain rango in background and some-
thing to do with underground caves or
mines or decp shafts--half man made,
half natural--some clectric humming
going on~-throbbing, inner throbbing.
Nuclear or some very far out and
possibly secret installation--corridor--
mazes of them--whole underground city
almost--Don't like it at all--long for
outdoors and nature, 2:00 PM-~
(Experimenters) R and H walking along
sunny road--entering into arbor-like
shaft--again looks like man helped
nature--vines (wisteria) growing in
arch at entrance like to a wine
cellar--leading into underground world,
Darker earth-smelling cool moist
passage with something grey and of
interest on left of them--musty--
sudden change to bank of elevators--a

very man-made steel wall--and shaft-
like inverted silo going decp below
earth--brightly lit..."

She concludes with

"TI see a lot of gold and metal and
silver-gold glow all over--not much
sound--very silent factory--scary-~few
people--very special.?

As is often the case, one observes that the
pasic gestalt of the target site is cognized
and even experienced, while specifics are mis?
interpreted,

New Orléans-California

Two experiments carried out between New
Orleans and Menlo Park, CA, constitute the
latest members of the long-distance series, five
experiments of which have been completed to date
(all reported here), These were carried out
with the two subjects who had participated in
the New York-California experiments,

During an extensive cross-country trip, we

arranged to conduct two experiments between New Orleans and Menlo Park, CA, one each way, The Menlo Park subject was not told in what city the outbound experimenter was located, He knew only that the outbound experimenter was in the cen~ tral time zone,

For the first experiment (subject in Menlo Park) it was agreed that at 12:00 noon CST on a particular day, the outbound experimenter would choose a target location in his city by random protocol and remain there for the required fif- teen minutes, During this time, the subject in Menlo Park would tape-record his impressions and make any drawings that seemed appropriate, (The

°

ARPA net was not available because of computer not malfunction.)

The target choson by randomized entry inte a New Orleans guide book list was the Louisian: Superdome, The outbound experimenter tape~ recorded the following description as he looker at the building, ?It is a bright sunshine day. In front of mec is a huge silvery pbuilding with

white dome gleaming in the sun, It is a circu-
lar building with metal sides, It looks like
nothing so much as a flying sauccr. The targe?
is in fact the 80,000-seat Louisiana Superdome
stadium,"

The subject in Menlo Park described the
target as "a large circular building with a
white dome," He also expressed feelings of
wanting to reject what he saw because the dome
looked to him "like a flying saucer in the
middle of a city." Some appreciation for this
perception can be obtained from Figure 9 in
which the target is shown, together with the
sketches that the subject made,

The most recent experiment in this series
involved a subject in New Orleans viewing acti:
ities of a group of three people known to her,
at a location in the Palo Alto/Menlo Park area
2000 miles away. Her principal impression was
of a ?overhang of a building over their heads
. . also a round gold rim around a sunken de-
pression," The target, a bank building is sho
in Figure 10, Principal features of the targe
include a dramatic building overhang, and a
rectangular concrete depression with a fountai

in which the water comes out of a circular gol rim,. The subject also reported "some kind of fake china flowers mushrooming out of the depression,? There were four orange lamps mounted on the gold rim, Finally, she reported ?there was a projectile coming toward David (c of the outbound experimenters), Like a pall ¢ frisbee, as if Elizabeth (another experimente) has tossed him a ball." Actually the experimenters had found a paper airplane lying on ti ground and had thrown it back and forth for some period of time, In fact, the photo of tl site taken at the time of the experiment show the airplane between them, This is one of the few times that a remote viewing subject has pt ceived rapid motion at the target site.

The results obtained to date in the long distance remote viewing series appear to be roughly of the same caliber as those obtained local remote viewing experiments, The descri tions not only contain correct information beyond that expected by chance, but also show remarkable detail and resolution. Although e tensive data must be taken before a final con clusion can be reached, we are led to conelud at this point that there is little, if any, d

gradation in quality of perception as the suk

ject-target distance is increased from a few

FIGURE 9

LONG DISTANCE REMOTE VIEWING EXPERIMENT ? SRI,

MENLO PARK, TO LOUISIANA SUPERDOME. SUBJECT

DESCRIBED LARGE CIRCULAR BUILDING WITH A WHITE

DOME. 31 OCTOBER 1976.

miles to transcontinental distances, The results obtained on the basis of viewing a New York site from SRI in Menlo Park, California, three thousand miles away, for example, are similar to those obtained in local remote viewing experiments, Any theory of paranormal functioning put forward at this time should take this insensitivity to distance into account,

PRINCIPLES OF PHYSICS

POTENTIALLY APPLICABLE TO PSI PHENOMENA

One of the common objections to the exis-

tence of so-called paranormal functioning is that it would seem to be in conflict with the jaws of physics, Our investigations, however, have led us to the contrary view that the data can in all probability be accounted for either within the framework of physics as presently understood, or within the framework of extra~

polations that have! been proposed to account for

other (non-psychic) data, In fact, we antici-

pate that not only can we use physical princi-

SO TTR RE RR?

ples to help us understand psi phenomena, but the psi data base will probably shed light on some of the current problems in physics, e.g. with regard to the foundations of quantum theory, and for geometrical models of space-time events such as exist in relativity theo
In this section we outline how we are making of our experimental data base to deduce the relevant physical principles and laws that govern psi functioning. 1.

In addition to attempting to determine
whether psi phenomena are generally compatib
with the laws and content of physics as pres:
ently codified, we are also examining the li
of specific physical theories in modeling ps
phenomena, The areas of physics we have und
consideration as potentially relevant to mod
ing psi phenomena include: the possibility
remote viewing is mediated by extremely low-
frequency (ELF) electromagnetic waves; 2-17
possible significance for remote viewing of
Bell's theorem?® and the Einstein-Podolsky-R

RE A CEPR ITN

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FIGURE 10

REMOTE VIEWING EXPERIMENT ?

SUBJECT DESCRIBED:

?A ROUND GOLD RIM AROUND A

THE DEPRESSION THERE IS SOME

BONSAI TREE MUSHROOMING OUT

SHE SAID ?THERE WAS A PROJECTILE COMING TOWARD DAVE.

PROJECTILE, LIKE A BALL OR FR

(IT WAS A PAPER AIRPLANE.)

(EPR) paradox!? of quantum theory which empha~
size that "no theory of reality compatible with
quantum theory can require spatially separated
events to be independent,"29 put must permit
interconnectedness of distant events in a manner
that is contrary to ordinary experience?!~
(experimentally confirmed at the microscopic
level)* ~ the proper interpretation of the
effect of an observer (consciousness) on experi~
mental measurement , 25-2 of possible signifi-
cance in psychokinesis; the possibility that the

causality-reversing tachyon? or advanced-=po~

tential solutions of physics may play a role in

precognition;?°~ the potential relevance (for

a general theory of psi phenomena) of theories

based on geometries which provide for a more

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S reeer eet naa casei ea sacs tcer einen ee ane

Circular Fountain in

Concrete Depression

NEW ORLEANS TO PALO ALTO, 30 OCTOBER 1976.

?THE OVERHANG OF A BUILDING OVER THEIR HEADS,? ALSO

SUNKEN DEPRESSION? .... ?IN THE SURFACE OF

KIND OF FAKE CHINA FLOWERS. IT?S LIKE A

OF THE SURFACE.? LATER IN THE TRANSCRIPT

SOME KIND OF A

ISBEE. AS IF ELIZABETH TOSSED HIM A BALL.?

extended structure of the space-time metric.*
To indicate the tenor of our approach, let us
consider briefly two examples from this list.

A reasonable first hypothesis is that re-
mote viewing is mediated by extremely low-
frequency (ELF) electromagnetic waves, a hypot
esis that docs not seem to be ruled out by any
obvious physical or biological facts,

We wish to acknowledge the technical contri-
putions of Elizabeth A. Rauscher, a consulta
to SRI on leave from Lawrence Berkeley Laboré
tory, who has done extensive research on phy:
cal theories relevant to psi functioning; in
particular, work on multidimensional
geometries,

This hypothesis, put forward by I, M, Kogan of tho Sovict Union, suggests that information transfer under conditions of Sensory shielding is mediated by ELF waves with wavelengths in the 300 to 1000-km region,+2~15 xnerimental support for the hypothesis is claimed on the basis of: less than inverse square attenuation with distance, compatible both with earth-ionosphere waveguide mode trapping, with sourcc-percipient distanees lying in the induction ficld range as opposed to the radiation field range; observed low bit rates (0,005-0,1 bits/s) compatible with the information carrying capacity of ELF waves; apparent ineffectiveness of ordinary electromagnetic shielding as an attenuator; and standard antenna calculations entailing biologically generated currents yielding results compatible with observed signal-to-noise ratios,

On the negative side with regard to a straightforward ELF interpretation as a blanket hypothesis are: (a) apparent high-resolution, real-time descriptions of remote activities in

sufficient detail to require a channel capacity in all probability greater than that allowed by a conventional modulation of an ELF Signal; (b) lack of a proposed mechanism for coding (and decoding) the information onto the proposed ELF carrier; and (c) apparent precognition data,

The hypothesis must nonetheless remain open at this stage of research, since it is conceivable that counterindication (a) may eventually be circumvented on the basis that the apparent high resolution and high bit rate results from a mix~ ture of low bit rate input and high bit rate ?filling in the blanks" from imagination; coun- terindication (b) is common to a number of nor~ mal perceptual tasks and may therefore simply reflect a lack of sophistication on our part with regard to perceptual functioning;* and counter- indication (c) may be accommodated by an ELF hypothesis if advanced waves as well as retarded waves are admitted,79»

Experimentation to determine whether the ELF hypothesis is viable can be carried out by the use of ELF sources as targets, by the study of parametric dependence on propagational directions and diurnal timing by experimentation under

unusual conditions of shielding (e.g., ina submarine), and by the exploration of interference effects caused by creation of a high-intensity ELF environment during experimentation, All of these are under consideration in our laboratery and elsewhere,

Because of the apparent difficultics with the ELF hypothesis, especially in accounting for the relatively high resolution and data rate of paranormal perception, serious consideration is being given to alternative mechanisms, A more speculative, but promising, hypothesis, which could in principle account for both remote

vicwing and precognition, was doveloped in con junction with Gerald Feinberg of Columbia University, It is proposed that the ordinary Minkowski 4-spaco (three spatial, one temporal coordinates) might simply be the real part of ; cight-dimonsional complex space-time, For thi: generalized coordinate model we let the spatia! coordinates xx + ix , and similarly for tinic t- t+ it, Analogous to the expression for

the square of the distance between two points :

Minkowski 4-space,

As® = hx? 7a?

we take the corresponding ?expression in the con

plex 8-space to be

ds? = Ashs* = dx? + Ax?? - At? ~ e7ae? .

With regard to modeling remote viewing in

real time (At = 0), we can construct situations

in which the remaining first, second, and

fourth terms in the above cquation add to zero

(4s = 0), Therefore, even though ?there is an

ordinary (3-space) separation Ax between the ty

points, the distance in the complex 8-space is

reduced to zero, Under the hypothesis that the

imaginary (primed) coordinates are accessible

to consciousness, reduction of the 8-space

separation to zero could in principle provide

for a coupling between remote viewer and targe:

site, Given the additional geometrical channe:

provided by this model, a similar argument can

be mounted to account for precognition (As = 0

for At <0), We thus have the possibility of :

geometrical interpretation of the "Quantum

Interconnectedness" principle by which events remote in spacetime are nonetheless connected | non-local correlations, =2: or, in this inter. pretation, by the nature of the fabric of spacetime itself,

We are presently pursuing the implication: of these and other models, Our goal in these investigations is to develop a theoretical structure to account for the data at hand, and to predict new, testable experimental outcomes

CONCLUS IONS:

In this paper we have described our inves. tigation of particular aspects of paranormal functioning of human subjects, Specifically, - have examined the human capability to access a describe, by mental processes, information sources blocked from ordinary perception by re son of distance and shielding. We have found remote sensing to be a robust phenomenon in which experienced and inexperienced subjects a able to describe in words and drawings both th location and actions of experimenters placed a undisclosed sites at varying distances from th subjects,

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From over seventy experiments with remote sensing, we have obtained three principal findings. First, wo have established that it is possible to acquire significant amounts of information about remote locations, Sccond, the physical distance separating the subject from the scene--even distances ranging over thousands: of kilometers in recent transcontinental experiments=-docs not appear to lessen the accuracy of the perception, Third, the use of Faraday cage electrical shielding does not in any apparent way degrade the quality of the description obtained,

)

One of the purposes of our research is to make use of the remote perception experimental data base to deduce the relevant physical principles and laws that govern paranormal functioning. In pursuit of this goal we are endeavoring

to define the level of compatibility of paranormal phenomena with the laws of physics as presently understood and to examine the limits of specific physical theories in modeling these phenomena, To this end, we have considered some physical models potentially applicable to remote perception, but further investigation must be pursued, Therefore, we plan to continue our research efforts in the belief that not only can we use physical principles to help bring about an understanding of psi phenomena, but we anticipate that the psi data base may make a contribution toward the clarification of certain existing problems in physics,

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