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The Cognitive Sciences Laboratory
330 Cowper Street, Suite 200, Palo Alto, CA 94301
Voice: 415.327.2007 — Fax: 415.322.7960
e-mail: may@hildegard.saicmp.com

Memorandum

Date: 19 June 1995

SG1I

To: [   ]
From: Edwin C. May, Ph.D.
Re: "Top-ten" List

SG1I

Cc: [   ]

I have been asked to find "the 10 primary studies or reports developed   under the subject program...that make the best case for establishing the validity of the paranormal phenomena known as Remote Viewing." This memorandum is in response to that request.

Background

Although the request seems straight forward at the outset, to establish the existence of Remote Viewing on the basis of a subset of the total data set does not conform to the accepted practices for met-analysis as set forth in Rosenthal (1991) and Hedges and Olkin (1985). Besides the well-known file drawer problem, an additional problem arises because Remote Viewing (i.e., we now refer to this class of phenomena a Anomalous Cognition — AC[*]) data fall distinctly into three classes each of which might be examined separately. Those circumstances in which:

(1) Targets can be categorized as 1-in-N. That is, experiments in which the receiver is completely knowledgeable of all N possibilities and is constrained to respond within the set. This is called forced-choice in the literature and examples include Zeener card guessing (N=5) and binary guessing (N=2).

(2) Targets are unrestricted with regard to content. These experiments are called free-response in the literature, because receivers are generally not aware of the details of the target pool content and are free to respond accordingly. The majority of the AC has been of this type.

(3) Statistical analysis is not generally possible, but the circumstances and quality of the data make compelling arguments in favor of an anomaly. Such examples cannot be used as definitive proof; however, they may provide *prima facie* evidence.

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[*] Please see the Glossary at the end of this Memorandum for a definition of terms.

The average effect size (i.e., a standardized measure of the magnitude of the effect—See Rosenthal, 1991) for forced choice AC experiments is approximately one order of magnitude smaller than for free-response AC experiments. Thus, it is likely that different criteria might be set to establish the validity of these two different procedures.

Two common approaches have been used in psychology and parapsychology to research behavioral phenomena. One emphasizes random selection of subjects, and the other examines the phenomenon with specialized subjects. These approaches answer different questions: How is the phenomenon distributed in the population? and What are the properties and mechanisms of the phenomenon? In other reviews of AC, studies are weighted in favor of the first approach (Radin and Nelson, 1991), however, our approach is nearly exclusively oriented to working with a relatively stable set of special subjects. These different approaches might also require different standards for the evaluation.

If part of the evaluation is oriented toward assessing whether AC can be used on problems of National interest, then it is important to realize that solid evidence for AC is neither a necessary or sufficient condition for utility. A near perfect example of AC, such as having a receiver provide complete, detailed, and accurate information about a missing person—all of which was known to others, does not aid in determining the location of the individual. On the other hand, examples of AC that do not meet normal laboratory criteria for being significant, might provide the critical missing piece of information to solve a major problem. In our application work, we have seen both examples.

Suggested Studies

In this section, I present the best studies and provide an argument as to why I have included each of them as part of this list.

SRI International (1973-1989)

Research Results (Statistical)

To avoid the potential file drawer problem, I suggest the following meta-analysis of all the research that was conducted at SRI International between 1972 and 1988 as my first choice for the review.

1.0   May, E. C., Utts, J. M., Trask, V. V, Luke, W. L. W., Frivold, T. J, and Humphrey, B. S. (1989). Review of the Psychoenergetic Research Conducted at SRI International (1973-1988). Final Report—Task 6.0.1, Project 1291. SRI International, Menlo Park, CA.

This 18 man-month, client-directed study is a comprehensive review of the complete SRI database for the studies of anomalous mental phenomena. The study conforms to the standard practices of modern meta-analysis. The analysis of 966 anomalous cognition trials (i.e., all to date) demonstrated an effect of 6.5σ for a single trial effect size of 0.209 ± 0.032. Many additional categories are also considered.

While this study was conducted by SRI personnel, it enjoyed significant government oversight. Checks on the validity o f the analysis can be easily accomplished from within the document set on hand.

From this same time period I select the formal study from within:

2.   May, E. C. and Trask, V. V. (1989). Forced-Choice Viewing. Final Report, Project 1291. SRI International, Menlo Park, CA.

Guessing binary target is one of the most difficult AC tasks. The   formal portion of this report describes a cross-country, 50 trial experiment that was monitored by two government representatives. A 76% hitting rate was achieved. In spi te of the small n, I have selected this study because of its careful protocol design and extreme methods to eliminate the potential of non-AC leakage of information—a characteristic of the SRI research.

Another example of successful AC and methodological care is our tachistoscope study. We posited that the quality of AC would depend upon the intensity of the feedback at the end of each trial. This precognitive model was not verified in the study although two of the four receivers produced significant results and the study showed significant evidence for an information transfer anomaly overall.

3.   May, E. C., Lantz, N. D. and Piantineda, T. (1994). Feedback   Considerations in Anomalous Cognition Experiments. *Journal of Parapsychology.*

This experiment has been accepted for publication in the   peer-reviewed technical journal, *Journal of Parapsychology*. The reference to the annotated bibliography is 107a for the primary reference and 207b, my submission for document number 3.

4. Hubbard, G. S., May, E. C., and Frivold, T. J. (1987). Possible Photon Production During A Remote Viewing Task: A Replication Experiment. Final Report—Objective E, Task 1, Project 1291. SRI International, Menlo Park, CA.

In this study, we replicated the AC portion of an earlier experiment conducted at SRI. Both studies initiated an attempt to verify a Chinese claim that concomitant photons are emitted from a target with successful AC. The latter claim was not substantiated, however, three of four receivers produced independently significant AC results in six trials each. The overall all result was significant at $p = 0.005$ by a binomial measure for an effect size of 0.262 ± 0.204.

Research Results Conclusions

With the exception of the tachistoscope study, the remaining experiments were not included in the meta-analysis in report 1 above because they were conducted later.

Application Examples

The following submissions to the list serve as examples of anomalous cognition in an application setting. Although I realize that such examples cannot be used to prove the existence of AC, because of the circumstances for the data collection, they serve as *prima facie* evidence, nonetheless. Minimally, if the reviewers are not convinced by the statistical evidence of an information transfer anomaly, then it seems reasonable to expect an alternative explanation/hypothesis, which meet the usual scientific standards, for the applications' apparent successes.

5.   Puthoff, H. E. and Targ, R. (1975).   Perceptual Augmentation Techniques Part Two: Research Report. Final Report, Document FF-78-45. Stanford Research Institute, Menlo Park, CA. SECRET.   DECLASSIFIED 2 / June 95

I submit two examples described within this document: (1) the large gantry and (2) and the West Virginia site by receiver S1. I suggest that the descriptions in this report and any other supporting material on these examples that may exist be provided to the reviewers.

6.   May, E. C. (1989). AN Application Oriented Remote Viewing Experiment. Final Report, Project 2740. SRI International, Menlo Park, CA.

This was a tes t-bed trial to simulate an application and to determine the degree to which specific elements in a technical setting can be sensed by AC. The report describes the protocol for data collection and a *post hoc* fuzzy set analysis; however, I submit the drawings and the corresponding target photographs on pages 11, 12, and 13 in the report in conjunction with the protocols as part of the *prima facie* evidence. The complete transcript of the session can be found at the end of the document.

Science Applications International Corporation (1991-1994)

To avoid the file drawer problem I propose that all reports that were generated during this time frame, or their equivalent publications be submitted for the review. There are not that many and a complete meta-analysis would be possible. The four final reports from among this set are:

7.   May, E. C., Luke, W. L. W., and James, C. L. (1994).   Phenomenological Research and Analysis. Final Report. Science Applications International Corporation, Menlo Park, CA.

8.   May, E. C. and Luke, W. L. W. (1993). Phenomenological Research and Analysis. Final Report. Science Applications International Corporation, Menlo Park, CA.

9.   May, E. C. and Luke, W. L. W. (1992). Phenomenological Research and Analysis. Final Report. Science Applications International Corporation, Menlo Park, CA.

10.   May, E. C. and Luke, W. L. W. (1991). Phenomenological Research and Analysis. Final Report. Science Applications International Corporation, Menlo Park, CA

I call particular attention to the 1994 description of a two year AC study:

Lantz, N. D., Luke, W. L. W. and May, E. C. (1994).   Target and sender dependencies in the Anomalous Cognition Experiments.   *The Journal of Parapsychology*, Vol. 58. 285-302.

Conclusions—SAIC

From these reports, it is possible to conduct a meta-analysis, which avoids the file drawer problem, of all the anomalous cognition studies conducted at SAIC.

GLOSSARY

Not all the terms defined below are germane to this report, but they are included here for completeness. In a typical anomalous mental phenomena (AMP) task, we define:

- **Anomalous Cognition (AC)**—A form of information transfer in which all know sensorial stimuli are absent. That is some individuals are able to gain access to information by an as yet unknown process. This is also known as **Remote Viewing (RV)** and **Clairvoyance**.

- **Agent**—An individual who attempts to influence a target system by mental means alone.

- **Analyst**—An individual who provides a quantitative measure of AC. This individual usually is blind to experimental conditions and the intended target.

- **Anomalous Perturbation (AP)**—A form of interaction with matter in which all known physical mechanisms are absent. That is, some individuals are able to influence matter by an as yet unknown process. This is also known as **Psychokinesis (PK)**.

- **Beacon**—An individual who, while receiving direct sensorial stimuli from an intended target, acts as a focus of attention for the receiver in AC experiments.

- **Compute Assisted Search (CAS)**—The use of computer-generated options which are linked to real-world objects in a Search task.

- **Feedback**—After a response has been secured, information about he intended target is displayed to the receiver or agent.

- **Monitor**—An individual who monitors and AMP session to facilitate data collection.

- **Noise**—Incorrect elements in an AC response.

- **Protocol**—A template for conducting a structured data collection session.

- **Receiver**—An individual who attempts to perceive by AC and report information about a sensorially isolated target. A Receiver is also known as a **Subject** or **Percipient**.

- **Response**—Material that is produced during an AC session.

- **Search**—The inverse of AC. That is, given a known target, determine its location. This is also known as **Dowsing**.

- **Sender**—An individual who, while receiving direct sensorial stimuli from an intended target, acts as a putative transmitter of that information to the receiver in AC experiments.

- **Session**—A time interval during which AMP data are collected.

- **Specialty**—A given receiver's ability to be particularly successful with a given class of targets (e.g., people as opposed to buildings).

- **Target**—An item that is the focus of an AMP task (e.g., person, place, thing, event).

- **Target Designation**—A method by which a specific target, against the backdrop of all other possible targets, is identified to the receiver (e.g., geographical coordinates).

- **Trial**—The smallest unit of data to be analyzed.

Fax Transmittal Cover Sheet

SG1I

To: [   ] - ORD

From: Edwin C. May, Science Applications International Corp.

Fax Phone Number: (415) 322-7960

Date: Tue, Jun 20, 1995 • 08:30

Transmitting (6) pages, including cover sheet.

If there is difficulty with this transmission, please call: (415) 327-2007

Note:

SG1I

[ ] the first version failed in FAX. This versions is slightly different from the copy I sent
I added that we should supply ALL the SAIC-generated documents for the review.
Please call if you have questions. Thanks, Ed

Here are the top 10.