

A Future for Dualism as an Empirical Science?

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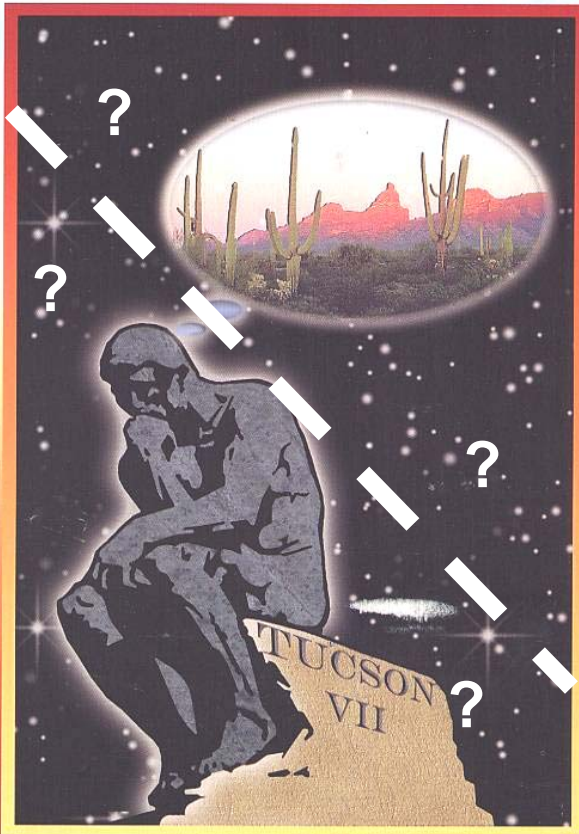
This is a preprint of a poster presentation scheduled for April 5, 2006 at the 7th biennial ***Toward A Science of Consciousness*** conference of the University of Arizona in Tucson.

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Section 1: Philosophy and Methodology

Toward A Science Of Consciousness 2006



Tucson Arizona April 4-8, 2006

<http://consciousness.arizona.edu/tucson2006>

Official Abstract: Materialistic monism, so successful in the physical sciences, has become so pervasive that it has become a rather absolute habit of thinking, an unquestioned style of looking at reality, rather than being treated as a testable, but not necessarily complete, hypothesis for guiding research and theory. This critical presentation surveys empirically observable phenomena, both in nature and laboratory, which do not fit well with materialistic monism and suggest that a form of interactive dualism is necessary at this stage of our knowledge to work toward a complete scientific and philosophical understanding of mind. The basic laboratory paradigm is to take our knowledge of the material world as essentially complete and then set up a situation in which no observable effects, according to a monistic material paradigm, can happen. If something nevertheless happens, the comprehensiveness of materialistic monism is undermined and new questions arise about the

nature of the phenomena observed. Such phenomena occurring in nature include out-of-body and near-death experiences and, under better observational conditions, extensive laboratory studies of psi phenomena (telepathy, clairvoyance, precognition, psychokinesis and paranormal healing), as well as semi-controlled studies of what would be the ultimate form of interactive dualism, communications from ostensibly deceased individuals suggestive of postmortem survival without a physical body.

Read On

Warning! This presentation is intended to provoke thought and investigation rather than to provide answers.

Dualism (overly) Simplified:

#1: Logical (?) Dualism: Logically define mind and matter as totally distinct. Then drive yourself crazy trying to make them interact, when you've already eliminated interaction by definition.

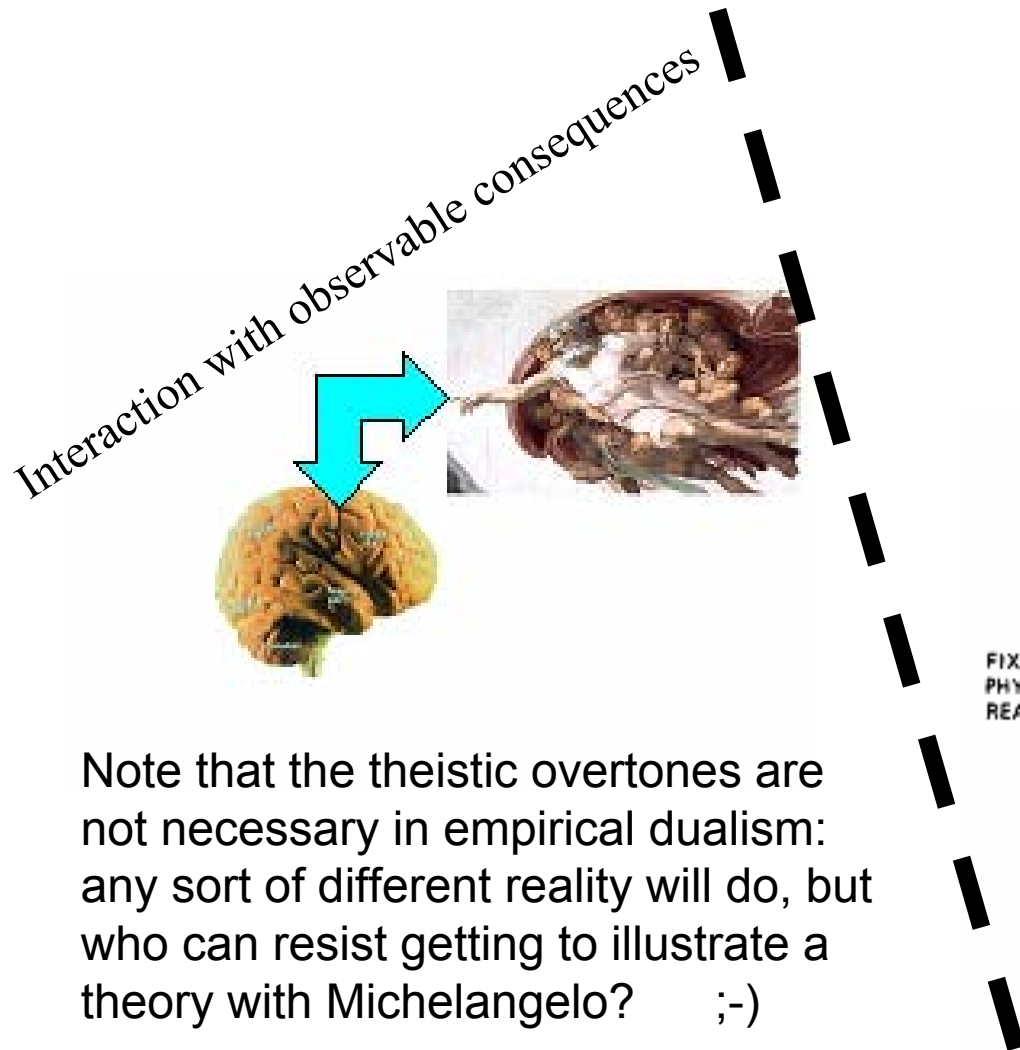
- we won't go there..... ;-)



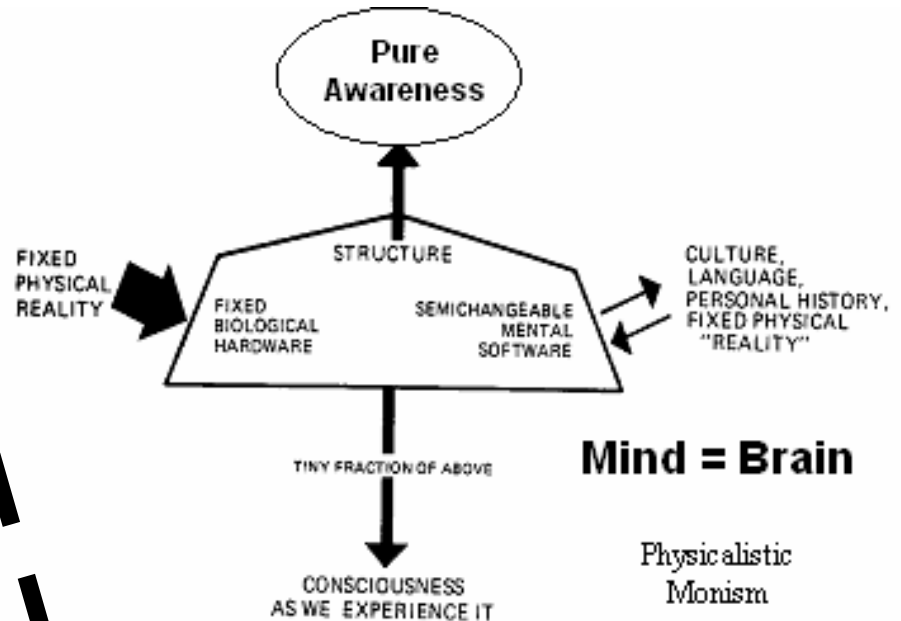
empirical Function: adjective
Date:1569 : originating in or based on observation or experience *empirical data* 2 : relying on experience or observation alone often without due regard for system and theory 3 : capable of being verified or disproved by observation or experiment
empirical laws

Theistic version of dualism, Michelangelo's *The Creation*. Interesting, but not scientifically useful...Essence of dualism is two distinct *kinds* of reality, each with its own laws and nature.

#2: **Empirical or Pragmatic Dualism.** Empirically investigate mind and matter each *on their own terms*, as well as looking for correlations and causal interactions.



Orthodox monistic materialism, which can function as a scientific, empirically testable theory or as a scientific ossification of cognition. What we call awareness arises as an epiphenomenon, a secondary effect from material brain functioning.



Principles of Essential Science

-**Observation**, data *always* primary

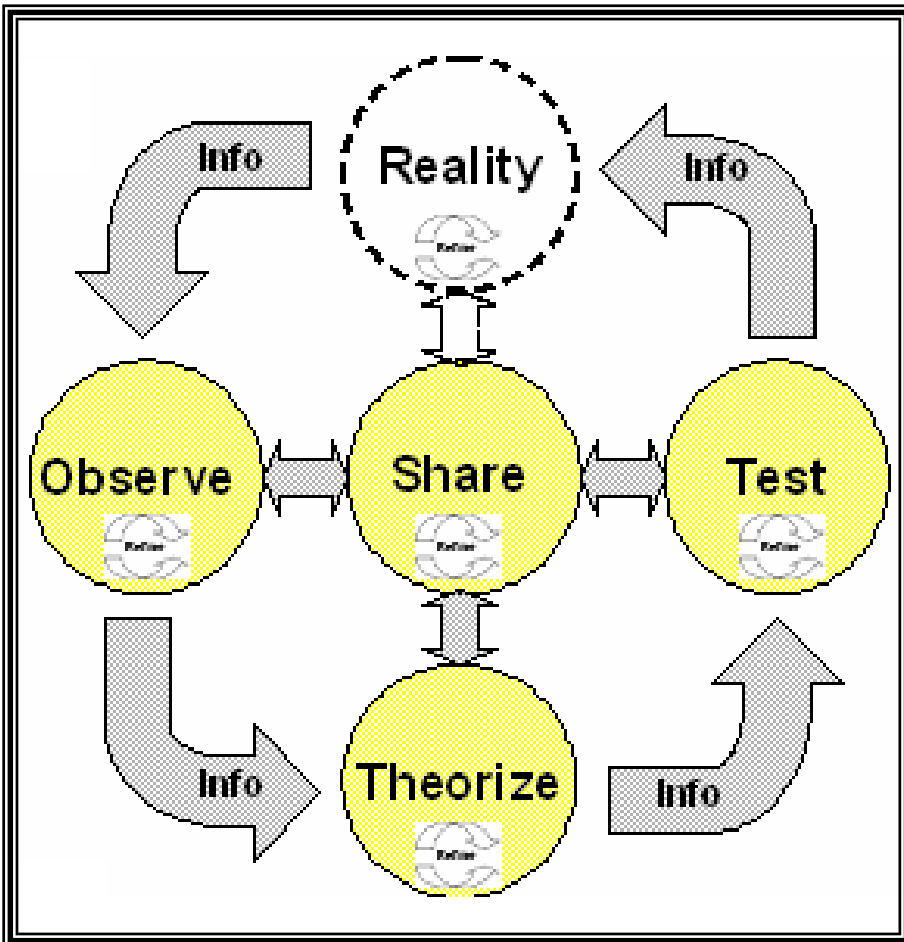
-**Theories** must account for all observations and be “logical” in some logic system

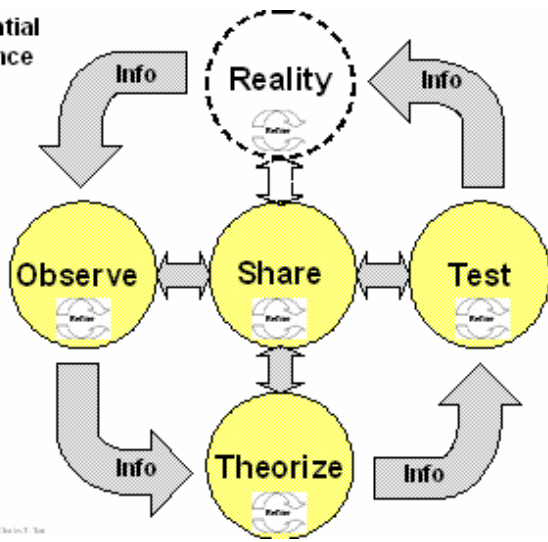
-Theories must lead to **predictions testable by empirical observation**

-All steps of the process are **shared** openly with peers so they may verify and extend observation

-All steps subject to **refinement** and improvement

-Repeated cycling thru the process leads to more congruence between data and theory - progress





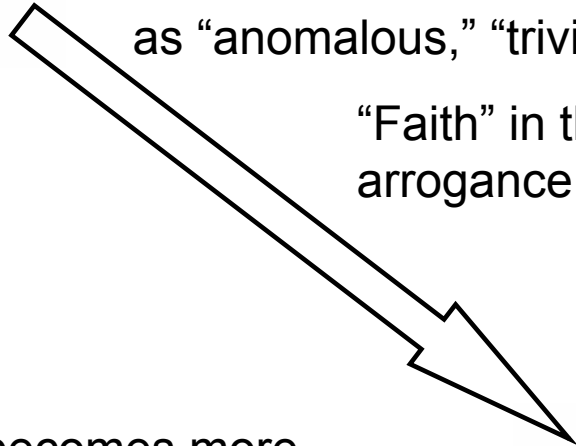
Science

Getting Stuck: Science Becomes Scientism

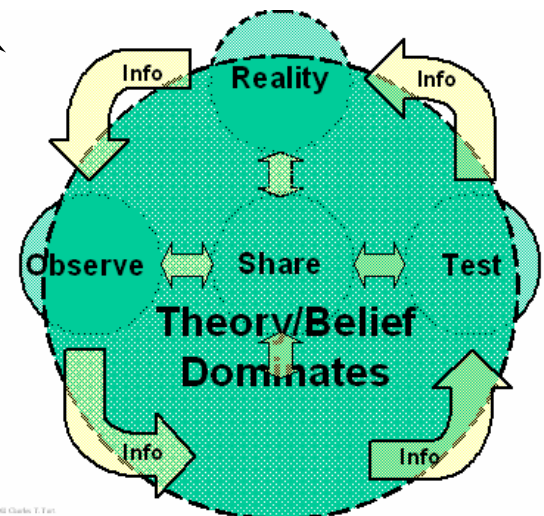
Very successful theories turn into Kuhnian paradigms, automatic and semi-implicit styles of observation and thinking

Data that doesn't fit is automatically dismissed as “anomalous,” “trivial,” “unimportant”

“Faith” in the paradigm leads to arrogance



Scientism

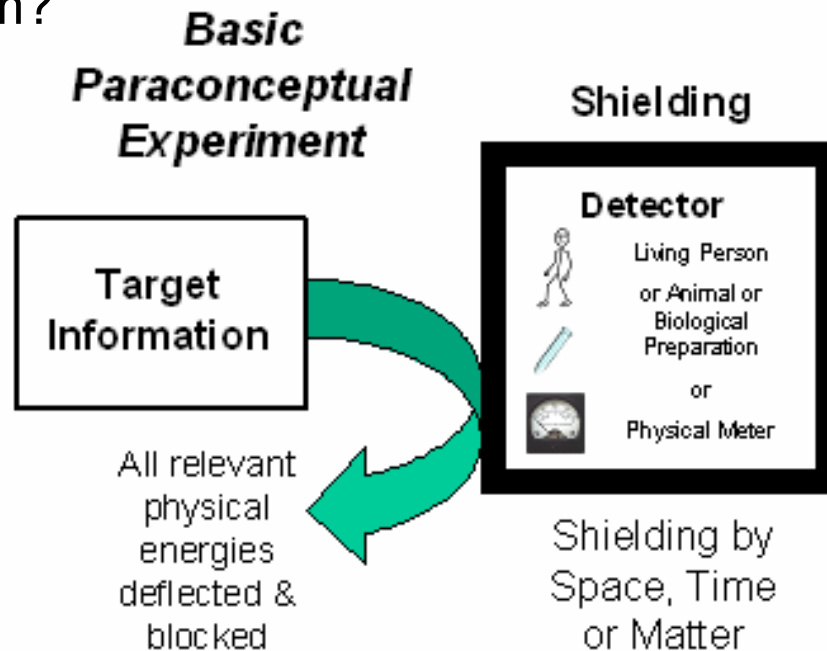


In **scientism**, theory/belief becomes more important than observation/data.

Promissory Materialism as an example. “They will find the physical basis of it someday.” “It” being all phenomena of mind. This belief cannot be falsified so is not a scientific theory.

Section 2: Empirical Data Supporting Dualism:

Empirical Dualism must be formulated so that it has empirically testable, **observable consequences** in the material, as well as the mental, world. This leads to the basic Paraconceptual Experiment. Given our known data and concepts about the material world, and *reasonable* extrapolations of them, can you empirically observe data that imply actions or factors that are *para*, outside of or beyond our material conceptual system?



A paraconceptual experiment sets up a situation in which, assuming completeness of our materialistic conceptual system, *nothing can happen*. If something does happen, we have a paraconceptual effect.

Read On

DILBERT - Scott Adams

KEN THE SKEPTIC

I alone know the contents of this envelope

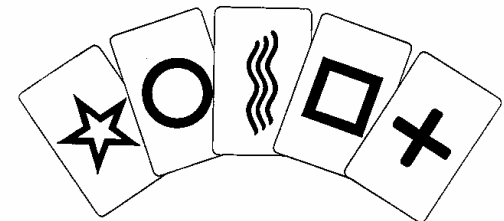
It's a charcoal drawing of a woodchuck eating a small orange

Nice try you little fraud, but that's a long way from an ink drawing of a beaver eating a tangerine



Field	% Use of (Double)-Blind Conditions
Physical Sciences	0%
Biological Sciences	1%
Psychology & Animal Behavior	5%
Medical Sciences	6%
Parapsychology	85%

Paraconceptual studies must be objectively evaluated so bias, pro or con, is eliminated. Multiple choice card guessing tests were common in the classical era of parapsychology, but almost entirely replaced by computer-controlled studies today. Basic statistics give probability estimates whether target info results are different from chance expectation.



Classic ESP Test Cards

Double-blind test protocols are far more widely used in parapsychology than other fields.

5 well-established paraconceptual, ψ phenomena

Hundreds of accumulated
experimental studies in refereed
journals over decades. Three
forms of information transfer
(ESP), two forms of effects on
physical world



Ψ

(pronounced sigh)

General collective term for:

Telepathy

Clairvoyance

Precognition

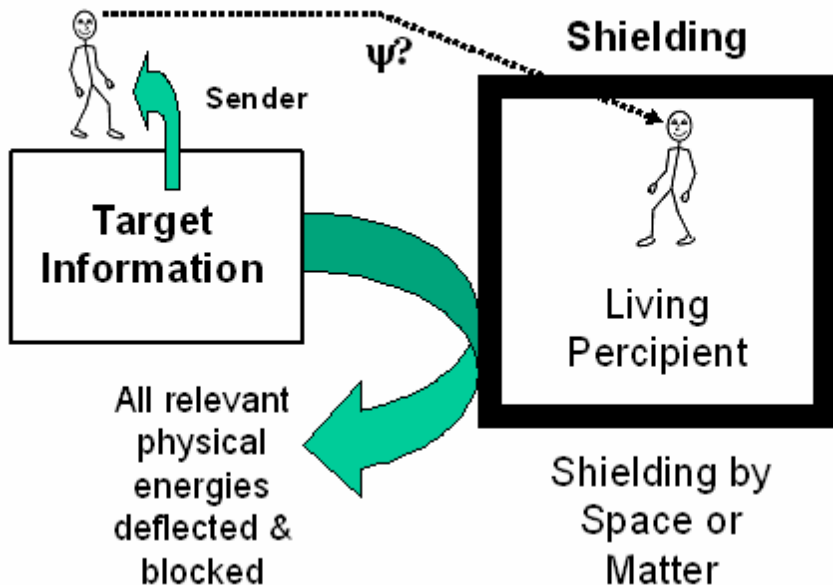
Psychokinesis (PK)

Psychic Healing

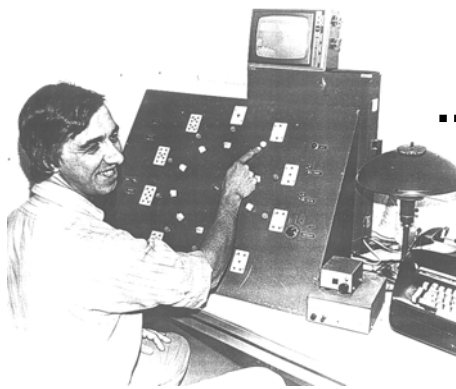


Forms of ESP,
Extrasensory Perception

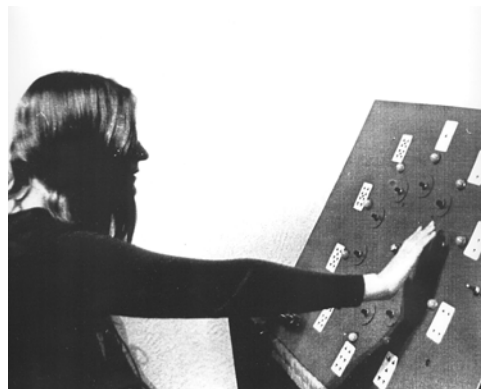
Basic Telepathy Experiment



Telepathy: noun Date: 1882 :
communication from one mind to another
by extrasensory means –telepathic *te-l*-
*pa-thik\ adjective –telepathically \-thi-
k(*-)|*\ adverb



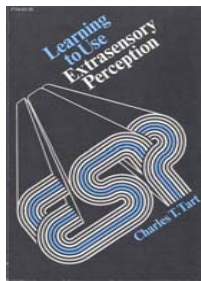
ψ ?
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Example: **Telepathy Training Study**

In the 1970s I and my students conducted several studies designed to see if telepathic ability could be improved by immediate feedback training, with partial success. Experimenters tried to send a number/card from 1 to 10 to screened percipients isolated in another room. Considerable ESP apparently resulted, the usual decline in scores with repeated guessing was *not* seen, and some showed signs of improvement.

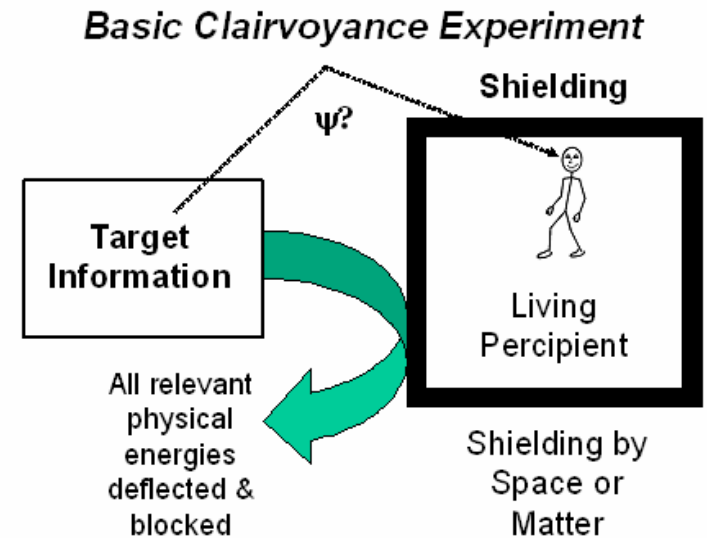
Technical details: Tart, C. T. (1976).
Learning to Use Extrasensory Perception.
 Chicago: University of Chicago Press.



Percipient	Hits / Chance	P (2-tailed)
A	124 / 50	4×10^{-28}
B	103 / 50	2×10^{-14}
C	81 / 50	4×10^{-6}
D	80 / 50	8×10^{-6}
E	78 / 50	4×10^{-5}
F	59 / 50	ns
G	57 / 50	ns
H	54 / 50	ns
I	47 / 50	ns
J	39 / 50	ns
Total	722 / 500	2×10^{-25}

Clairvoyance: noun Date:1840: the power or faculty of discerning objects not present to the senses 2 : ability to perceive matters beyond the range of ordinary perception

Remote viewing experiments, clairvoyance studies, at Stanford Research Institute asked percipients to describe some distant place with words and drawings.



Example: Percipient/viewer Pat Price's first words were: "What I'm looking at is a little boat dock along the bay. It's in a direction about like that (points in the correct direction). Yeah, I see the little boats, some motor launches, some little sailing ships, sails all furled, some with the masts stepped and other are up. Little jetty of little dock there."

The target location was the Redwood City Marina.

From R. Targ & H. Puthoff (1977) *Mind Reach*.... New York: Delacorte.

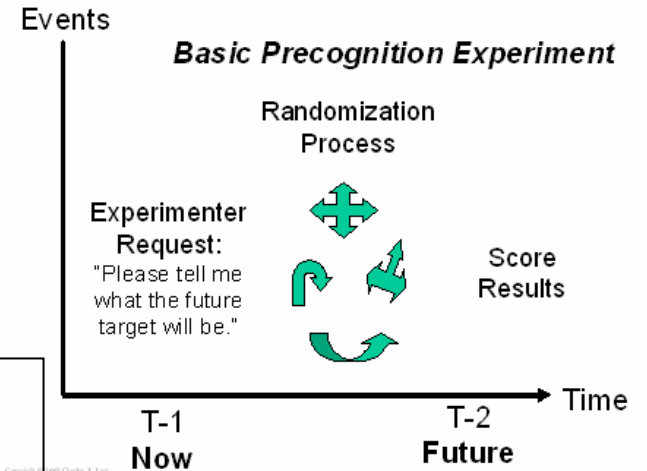
Confession: *Precognition boggles my mind, it makes no sense, I resist the idea. The damned data is just too good to deny it though.....*

Time, there's something quite funny about it. It's ridiculous to ask someone to predict a future that is determined by chance – and then see that too many results are significantly beyond chance, something is happening....

Precognitive Remote Viewing:

10:00am, E leaves lab, begins 20 minute drive, viewer asked to describe where E will be at 10:35am

10:20am: E uses random number generator to select where to go, arrives 10:35am, does appropriate things



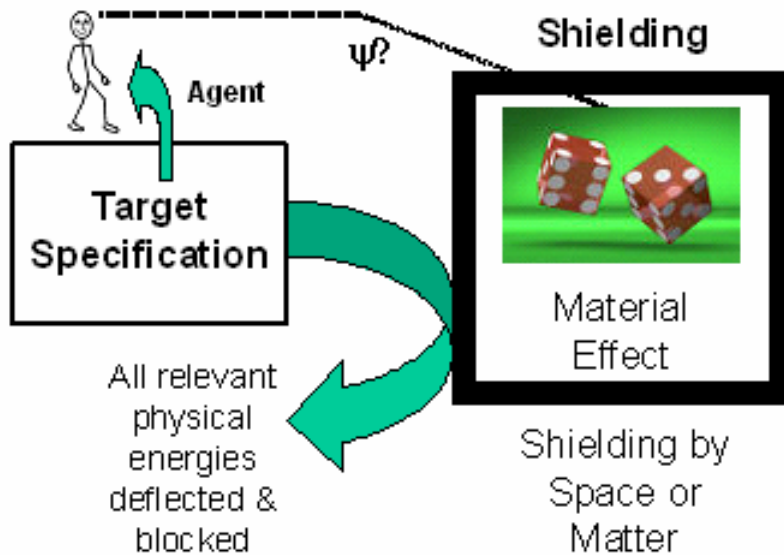
From Bisaha & Dunne chapter in C. Tart, H. Puthoff & R. Targ(1979) *Mind at Large: IEEE Symposia on the Nature of ESP*. New York: Praeger.



Two trains passed, one stopped while E was at the station.

Percipient 6: *"I have an image of looking at the traffic and seeing it go by really fast, speeding cars... I see a train station... I see a train coming... older building... trees... Wooden planks on the floor... There are posters or something ...benches ...tracks."*

Basic Psychokinesis (PK) Experiment

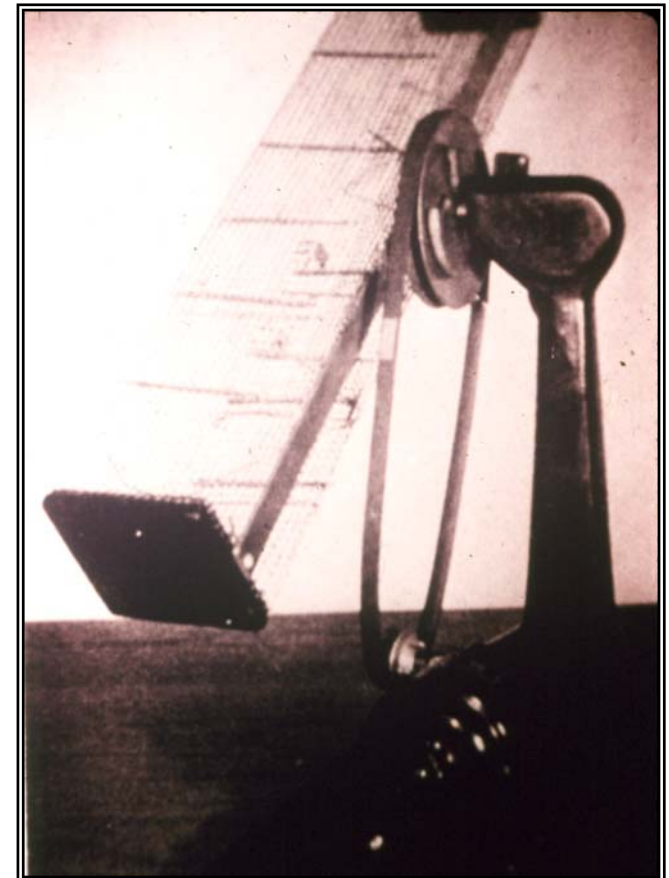


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Psychokinesis: noun 1914 : movement of physical objects by the mind without use of physical means, TELEKINESIS –

Classic parapsychological studies used dice, tumbled by machines like the one on the right, while a subject/agent at a distance was asked to will particular target faces to come up on specified trials. Target face aims were systematically rotated to cancel effects of any mechanical imperfections in the dice.

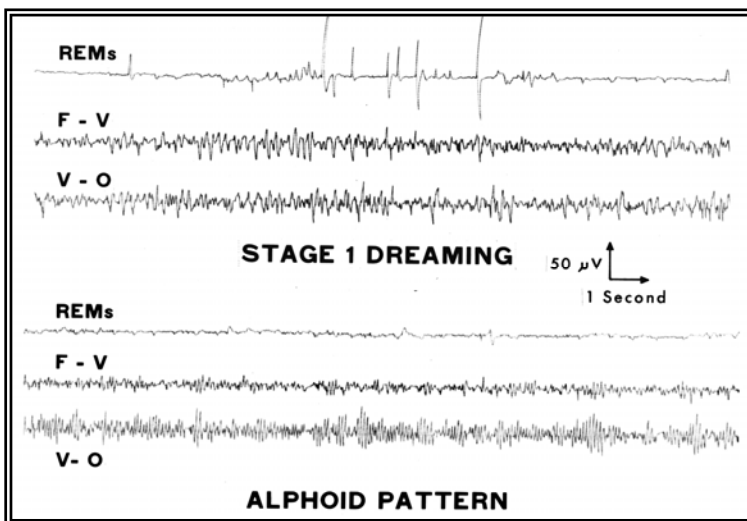
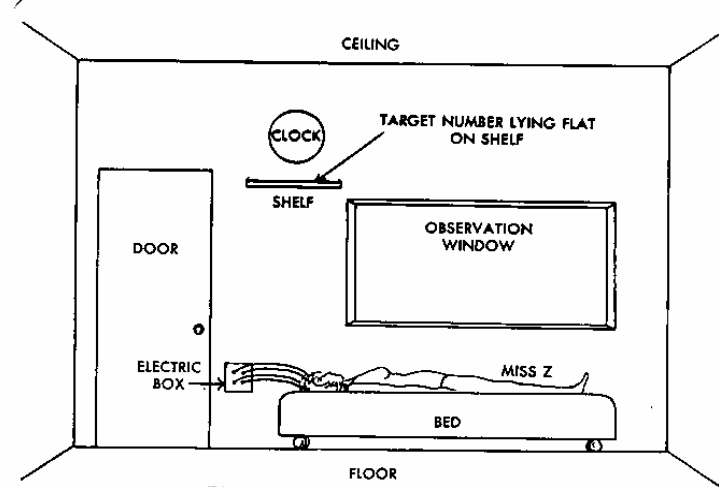
Today dice have been replaced by computer-controlled random number generators, activated by quantum processes or noise.



Section 3: Ultimate Dualism?

Ultimate Dualism: Out-of-Body Experiences?

Far more common than suspected and carrying great conviction that mind can exist independently of body. Definition: ***OBE = experience of mind being elsewhere than body while assessing one's state at the time as being as clear as ordinary consciousness, not a dream or delusion.***



Miss Z was a young woman who had had OBEs since childhood. They seemed real to her, but was it just her imagination or a misinterpreted lucid dream? To demonstrate the feasibility of researching OBEs under lab conditions, I was able to have her spend 4 nights in my sleep lab. She woke a number of times and reported brief OBEs, while showing an EEG pattern like stage 1 but with strong alphoid dominance, no REMs as would be seen in stage 1-REM dreaming, and no autonomic disturbances..

A different 5-digit random number was placed on the overhead shelf each night and Miss Z was asked to view and memorize it if she floated to the right position. She only claimed to have done this on one OBE and was correct, $P = 10^{-5}$.

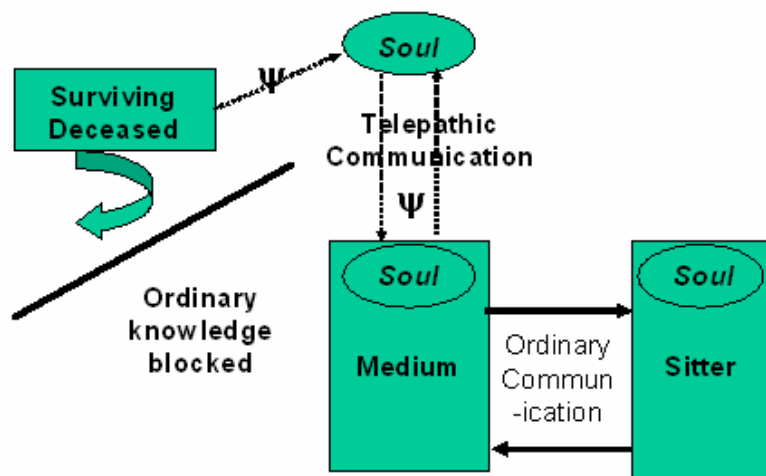


Postmortem Survival of Mind? Modern Spiritualism, with its mediums who believe they act as intermediaries for telepathic contact with surviving deceased minds, began in 1848 with mysterious rappings in the home of the Fox sisters. It rapidly developed into a world-wide (and highly controversial!) movement.



Spiritualism's initial attitude was compatible with science, agreeing that much of what people believed about religion was full of errors and *nothing should be taken on faith*. People should *test* spiritualism's claims by going to a medium, asking to contact a particular deceased relative or friend and then quizzing (via the medium) that alleged spirit until they were satisfied that the spirit had identified itself sufficiently to prove its identity, i.e. test the *theory* of survival against empirical *evidence*.

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Basic Model: Mediumistic Mediation of Communication With The Dead

Of course grief-stricken relatives do not make very objective and unbiased investigators, but enough scientists looked at mediumship sufficiently to establish that:

- most communications are too general or inaccurate to establish much of anything, but
- some are detailed and accurate enough to strongly suggest at least ESP is operative

Quality Mediumistic Evidence: An Example

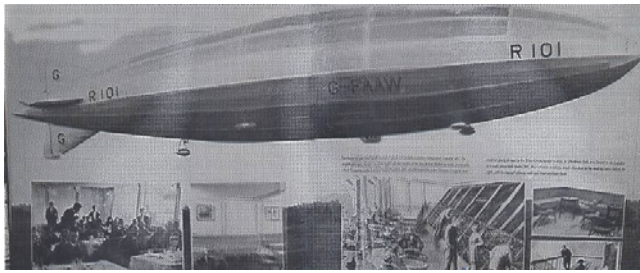
Survival of (some aspects of) a person's mind would be strong evidence for an empirical dualism, suggesting mind can exist in some "non-physical" (by current understandings of physics) mode but interact, via ESP, with the mind of mediums. One thought-provoking case study is given here, but many more exist buried in older scholarly and scientific literature.

Eileen J. Garrett, 1893-1970, one of the world's most famous mediums, she was scientifically oriented as well and established the Parapsychology Foundation to promote research. Mediums usually believe they have *controls*, ostensible spirits who help them contact the desired deceased during séances. Garrett's most frequent control called himself Uvani.



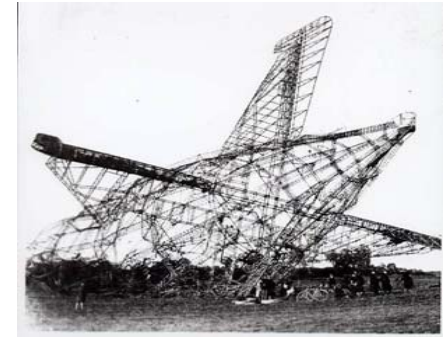
Asked what she believed about her mediumship near the end of her life, she remarked that on Monday, Wednesday and Friday she thought it was just what it seemed, she contacted deceased spirits. On Tuesday, Thursday and Saturday she thought the psychologists were right, it was her subconscious mind making up the spirits, with some ESP thrown in for verisimilitude.

On Sundays she tried not to think about it....



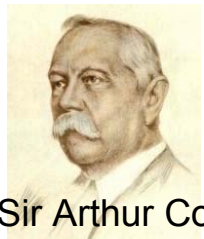
The R-101 was the glamorous space program of its day, built under British military auspices and designed to fly from England to India. It pushed the technology, much of it classified by the military, of dirigibles to the limits – and beyond.

Under great pressure to reach India by politically important dates, and contrary to the protests of the engineers who wanted to do much more testing, the R-101 left Cardington Aerodrome at 7:36 pm on Oct 4, 1930, for India. At 2:05 am that night it crashed into a hill in France and exploded. Forty-eight lives were lost.



Three days later, October 7, 1930, an already scheduled séance was held, at visiting Australian journalist's request, to try to contact the ostensible spirit of Sir Arthur Conan Doyle, who had died 3 months before. A stenographer took down everything spoken. Part way into the séance,

"...Then suddenly Eileen became agitated. Tears rolled down her cheeks. Her hands clenched. Uvani's voice became hurrying. 'I see I-R-V-I-N-G or I-R-V-I-N. [*Flight Lieutenant H. C. Irwin was captain of the R-101 - CTT*] He says he must do something about it. Apologizes for interfering, For heaven's sake, give this to them. The whole bulk of the dirigible was too much for her engine



Sir Arthur Conan Doyle, creator of Sherlock Holmes



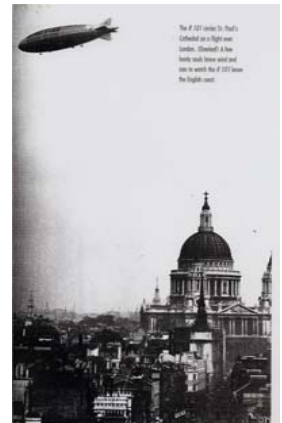
Actor portraying Sherlock Holmes

capacity. Engines too heavy.....Gross lift computed badly. And this idea of new elevators totally mad. Elevator jammed. Oil pipe plugged.....[more technical details].....Almost scraped the roofs at Achy." [Achy was a railroad junction in France, not shown on regular maps, near the final crash site – CTT]

From another séance: *Ostensible Communicator Irwin*: "One of the struts in the nose collapsed and caused a tear in the cover. It is the same strut that caused trouble before and they know... (sitter believes reference was to officials in Air Ministry). The wind was blowing hard, and it was raining. The rush of wind caused the first dive. And then we straightened out again. And another gust surging through the hole finished us.....The diesel engine had been backfiring because the oil feed was not right. You see the pressure in some of the gas bags was accentuated by the undergirders crumpling up. The extra pressure pushed the gas out. And at that moment the engine backfired and ignited the escaping gas.".....Lots more technical details given...

- quotes from J. G. Fuller, *The Airmen Who Would Not Die*. New York: Putnams, 1979.

- Royal Air Force Intelligence accused Garrett of having an affair with one of the R-101's officers, she knew too many secret technical details!
- Eileen Garrett's granddaughter Lisette Coly tells me that Mrs. Garret was very non-technical.



Prospects for Progress?

Barring unexpected breakthroughs,
minimal

Taboo topic, organized opposition
to stop and ridicule research

One year of parapsychology has
about as much support as one hour
of research in mainstream areas,
so progress is *very* slow

Parapsychological Association is
scientific professional group
(www.parapsych.org)

Several refereed journals

Unreliability and low-level of ψ
action is main real obstacle to rapid
progress

Nevertheless implications of current
data for dualism are profound, even
if applications minimal

In sum: Odd but solid data supporting an empirical dualism. To ignore it is scientism. How do we proceed on?