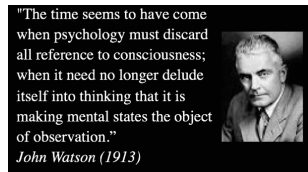

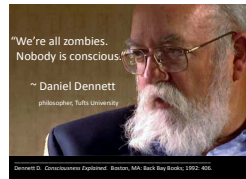


DIFFERENT VIEWS OF CONSCIOUSNESS

- * Consciousness is irrelevant

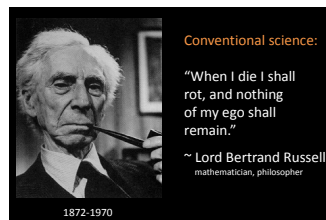
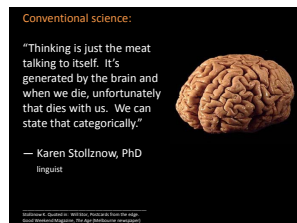
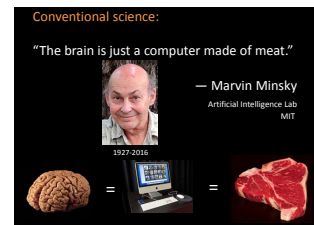
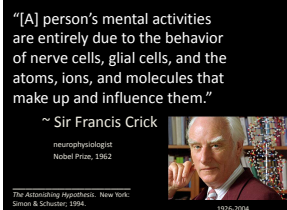
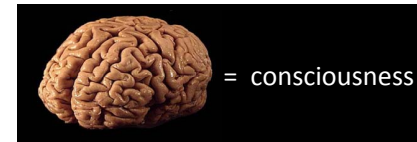


"Consciousness appears to be the last bastion of occult properties, epiphenomena and immeasurable subjective states - in short, the one area of mind best left to philosophers, who are welcome to it. Let them make fools of themselves trying to corral the quicksilver of phenomenology into a respectable theory."
Daniel Dennett (1991)

DIFFERENT VIEWS OF CONSCIOUSNESS

- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain



DIFFERENT VIEWS OF CONSCIOUSNESS

- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain
- * Consciousness cannot be explained by brain

- * Consciousness is irrelevant
- * Consciousness is just an excretum of brain
- * Consciousness cannot be explained by brain
- * Consciousness is fundamental
- * Consciousness is irrelevant to physics

- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain
- * Consciousness cannot be explained by brain
- * Consciousness is fundamental



~ David J. Chalmers
mathematician, philosopher



Chalmers DJ. 1995. The puzzle of conscious experience. *Scientific American*. 273(6): 80-6. <http://consc.net/papers/puzzle.pdf>

~ Erwin Schrödinger
Nobel Prize, 1933



Erwin Schrödinger. Quoted in: Walter Moore. *A Life of Erwin Schrödinger*. Cambridge, UK: Cambridge University Press. 1994: 181.

I do not say consciousness is not at this time understood from the laws of physics – I say it cannot be so understood.



DIFFERENT VIEWS OF CONSCIOUSNESS

- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain
- * Consciousness cannot be explained by brain*
- * Consciousness is fundamental
- * Consciousness is irrelevant to physics
- * Consciousness is part of physics

"It is not possible to formulate the laws of physics in a fully consistent way without reference to the consciousness of the observer."
Eugene Wigner (1957)



"Physics must expand to explain mental experiences"
Noam Chomsky (1975)



"Mind and Universe are complimentary"
John Wheeler (1977)



"The doctrine that the world is made up of objects whose existence is independent of human consciousness turns out to be in conflict with quantum mechanics and with facts established by experiments."
Bernard d'Espagnat (1983)



Physics cannot explain consciousness

"My position [on consciousness] demands a major revolution in physics.... [T]here is something very fundamental missing from current science. Our understanding at this time is not adequate and we're going to have to move to new regions of science...."



~ SIR ROGER PENROSE
mathematical physicist

Sir Roger Penrose. Quoted in: Karl Giberson. The man who fell to earth. Interview with Sir Roger Penrose. Science & Spirit. March/April 2008. 34-43.

Human consciousness is simply a state of matter, like a solid or liquid – but quantum

By Sebastian Anthony on April 24, 2014 at 8:10 am | 133 Comments



Consciousness as a State of Matter

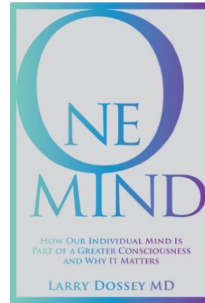
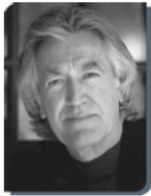
Max Tegmark
Dept. of Physics @ MIT Kavli Institute, Massachusetts Institute of Technology, Cambridge, MA 02139
(Dated: February 28, 2014)

We examine the hypothesis that consciousness can be understood as a state of matter, "perceptonium", with distinctive information processing abilities. We explore five basic principles that may distinguish conscious matter from other physical systems such as solids, liquids and gases: the information, integration, independence, dynamics and utility principles. If such principles can identify conscious entities, then they can help solve the *quantum factorization problem*: why do conscious observers like us perceive the particular Hilbert space factorization corresponding to classical space (rather than Fourier space, say), and more generally, why do we perceive the world around us as a dynamic hierarchy of objects that are strongly integrated and relatively independent? Tensor factorization of matrices is found to play a central role, and our technical results include a theorem about Hamiltonian separability (defined using Hilbert-Schmidt superoperators) being maximized in the energy eigenbasis. Our approach generalizes Giulio Tononi's integrated information framework for neural network-based consciousness to arbitrary quantum systems, and we find interesting links to error-correcting codes, condensed matter criticality, and the Quantum Darwinism program, as well as an interesting connection between the emergence of consciousness and the emergence of time.

DIFFERENT VIEWS OF CONSCIOUSNESS

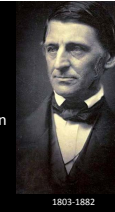
- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain
- * Consciousness cannot be explained by brain
- * Consciousness is fundamental
- * Consciousness is irrelevant to physics
- * Consciousness is part of physics
- * Consciousness is unitary

Larry Dossey



"There is one mind
common to all
individual men...
[a] universal mind..."

~ Ralph Waldo Emerson
essayist, philosopher



1803-1882

"To divide or multiply
consciousness is something
meaningless."



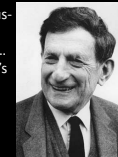
Erwin Schrödinger
Noted physicist, 1933
1887-1961

"There is obviously only one
alternative, namely the
unification of minds or
consciousness...
[I]n truth there is only
one mind."



Erwin Schrödinger
Noted physicist, 1933
1887-1961

"Deep down the conscious-
ness of mankind is one.
This is a virtual certainty ...
and if we don't see this it's
because we are blinding
ourselves to it."



David Bohm
physicist
1917-1992

Evidence for this from psi

Brain-to-Brain Connections

Using fMRI and EEG methodology, a dozen experiments demonstrate that distant brains of emotionally close individuals can simultaneously register a stimulus, when only one is stimulated.



David D. Fox is the central nervous system. In: *Entangled Minds*. New York, NY: Plenum, 2000, 156-157.
<http://davidfox.blogspot.com/2010/03/brain-to-brain-connections.html>

Is consciousness involved in nonlocality?

"The new physics presents prima facie evidence that our human thoughts are linked to nature by nonlocal connections: what a person chooses to do in one region seems immediately to affect what is true elsewhere in the universe...[O]ur thoughts... *do* something."

~ Henry P. Stapp
theoretical physicist
U. California, Berkeley



"It may be that our deep interconnectedness with each other and with all of Nature is the major conclusion that issues forth from the many findings of [consciousness research]."

~ William G. Braud
consciousness researcher



1942-2012

"[M]inds are entangled with the universe, so in principle minds can nonlocally influence anything, including a collection of other minds or physical systems."

~ Dean Radin, PhD
Chief Scientist, IONS
Entangled Minds



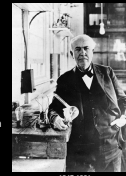
Dean Radin, *Entangled Minds*. New York, NY: Plenum Press, 2002, 210.

...and creativity

Creativity and discovery in science

"People say I have created things. I have never created anything. I get impressions from the Universe at large and work them out, but I am only a plate on a record or a receiving apparatus... Thoughts are really impressions that we get from outside."

~ Thomas Alva Edison



1847-1931

"My symphony will be something that the world has never heard before! ...I tell you, at certain places in the score, a quite uncanny feeling takes possession of me, and I feel as if I had not created this myself."

~ Gustav Mahler
composer



1860-1911

(in a letter to a friend about his Third Symphony, 1896)

Some acts of creativity, particularly when sudden and unexpected, "are not due to a spontaneous and largely unexplained stroke of genius, but to the elaboration of an idea or a pattern in two or more minds in interaction."

~ Ervin Laszlo
concert pianist, systems
theorist, author



On creative geniuses in science:

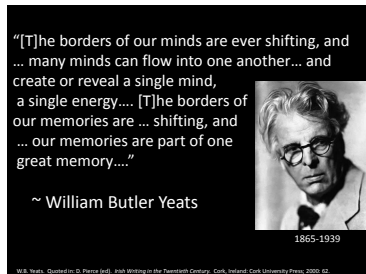
"[T]heir virtual unanimous emphasis on spontaneous intuitions, unconscious guidance, and sudden leaps of imagination which they are at a loss to explain, suggests that the role of strictly rational thought processes in scientific discovery has been vastly over-estimated."

~ Arthur Koestler
The Act of Creation



1905-1983

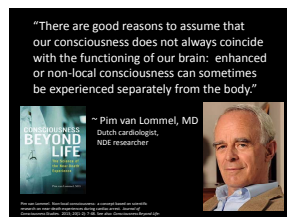
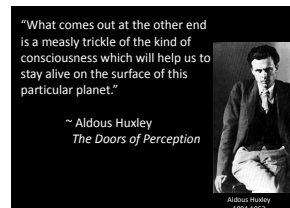
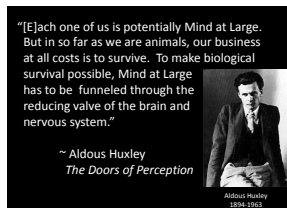
....and mystical experience



DIFFERENT VIEWS OF CONSCIOUSNESS

- * Consciousness is irrelevant
- * Consciousness is just an excrement of brain
- * Consciousness cannot be explained by brain
- * Consciousness is fundamental
- * Consciousness is irrelevant to physics
- * Consciousness is part of physics
- * Consciousness is unitary
- * Consciousness is filtered through the brain

Frederic Myers, William James, Henri Bergson



WE NEED A BRIDGE

Matter

Experiment

3rd person

Science



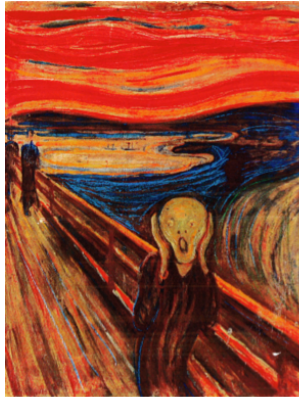
Mind

Experience

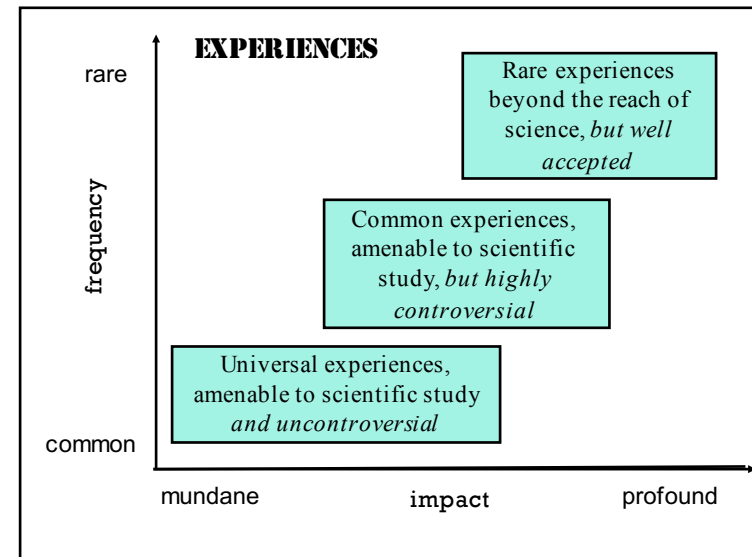
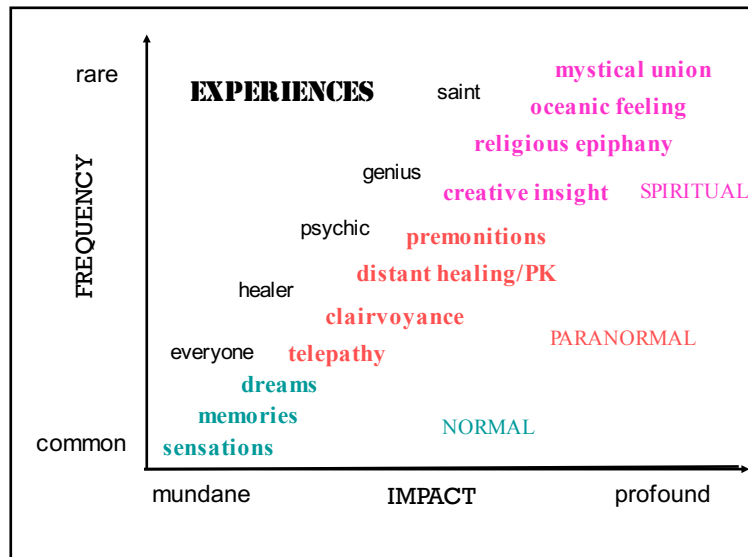
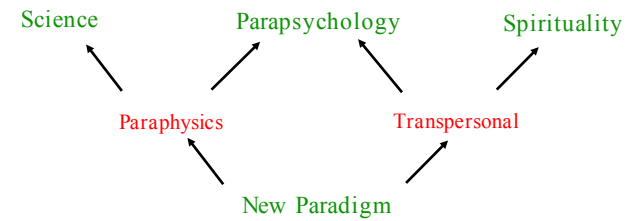
1st person

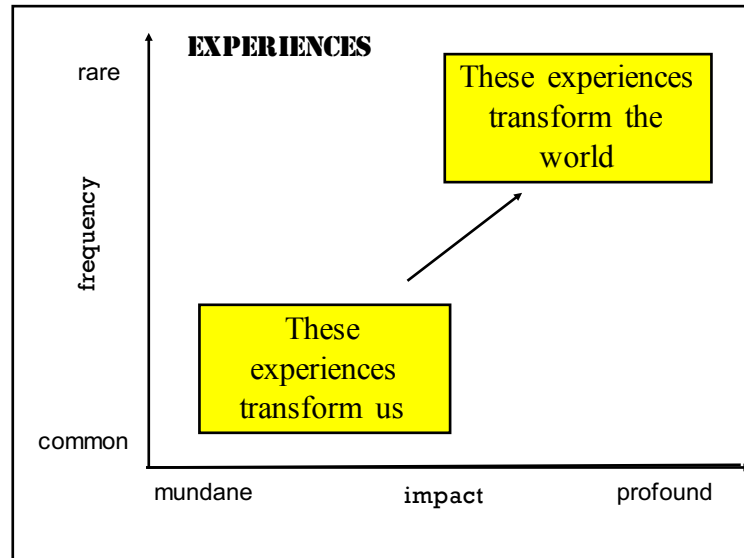
Spirituality

The strain of the bridge!



Double-bridge!





Linking psychic and religious experience



"As I was looking on, she (*Saint Teresa of Avila*) was raised about half a yard from the ground without her feet touching it. At this I was terrified, and she, for her part, was trembling all over. So I moved over to where she was and I put my hands under her feet, over which I remained weeping for something like half an hour while the ecstasy lasted. Then suddenly she sank down and rested on her feet and turning her head round to me, she asked me who I was, and whether I had been there all the while."

Transpersonal psychology and parapsychology overlap but use different methodologies and address different questions

Areas of common interest in transpersonal psychology and parapsychology

- Auras and subtle energy systems
- Channelling and mediumistic experiences
- Experiences of Angels
- Experiences of synchronicity
- Lucid dreaming
- Near death experiences (NDE)
- Out of body experience (OOBE)
- Past life memories
- Possession
- Prophecy and precognition
- Reincarnation experiences
- Sense of Presence
- Shamanic experience
- Spiritual healing
- Stigmata, and other bodily transformations
- Telepathy, clairvoyance and the "siddhis"
- Trance
- Experiences of UFOs, alien contact or abduction
- Psychokinetic phenomena
- Witchcraft and Magic

Daniels, M. (1998). Transpersonal psychology and the paranormal. *Trans.Psych.Rev.* 2, 17-31.

WHY THE ANTIPATHY FROM THE RELIGIOUS SIDE?

- Psychic powers are a distraction from spiritual path
- Mystical experiences are beyond science
- Psychic experiences are insufficiently spiritual

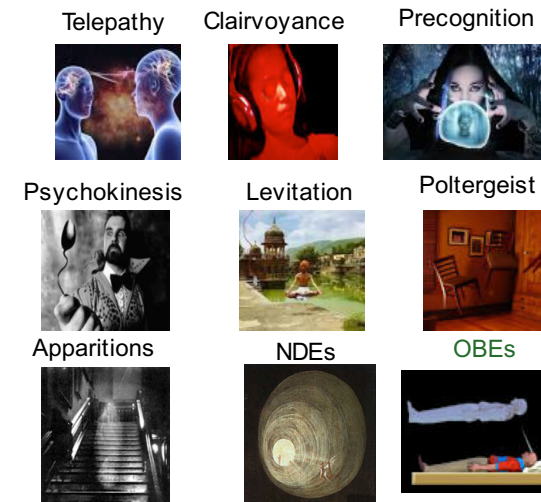
WHY THE ANTIPATHY FROM PARASYCHOLOGICAL SIDE?

- Discomfort with spirituality
- Experiment versus experience
- Lab versus life

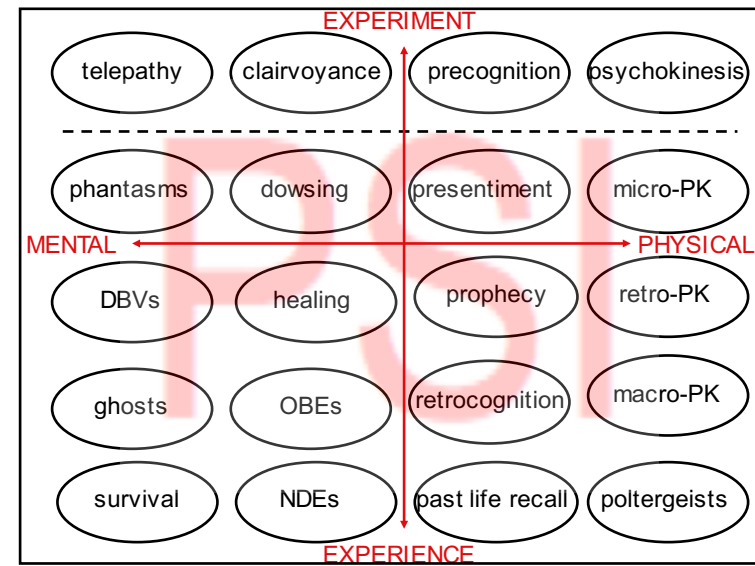
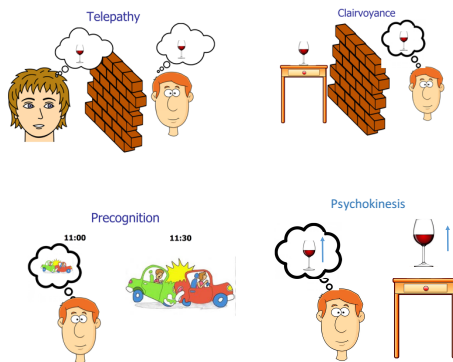
SIGNS OF BRIDGE CONSTRUCTION

- Psi-conducive states and training subjects (meditation)
 - Greater emphasis on experience (inside view of psi)
 - Transpersonal Psychology recognized by British Psychol' Assoc'
- Tart (1997) "Body, Mind, Spirit: Exploring the Parapsychology of Spirituality"

WHAT IS PSI?



PSI AS LINK BETWEEN MATTER AND MIND



SOCIETY FOR PSYCHICAL RESEARCH (SPR)



Edmund Gurney



Frederic Myers



Henry Sidgwick

Founded in 1882 "to examine without prejudice or prepossession and in a scientific way those faculties of man, real or supposed, which appear to be inexplicable on any generally recognized hypothesis."

Mesmerism, telepathy, hallucinations, apparitions, spiritualism...

MANY PROMINENT MEMBERS....

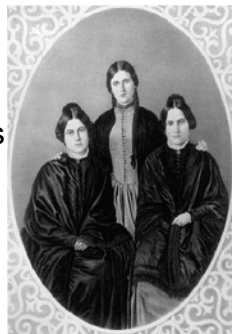
Nobel Laureate members

Lord Rayleigh	Physics 1904	(SPR president 1919)
J J Thomson	Physics 1906	
Marie Curie	Physics 1903 & Chemistry 1911	
Maurice Maeterlinck	Literature 1911	
Charles Richet	Medicine 1913	(SPR president 1905)
W B Yeats	Literature 1923	
Henri Bergson	Literature 1927	(SPR president 1913)
Nicholas Butler	Peace 1931	
Brian Josephson	Physics 1973	

Arthur Balfour, William James, Carl Jung, Sigmund Freud.....

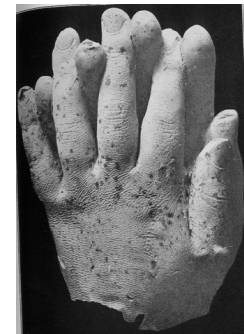
Spiritualism

- The Fox sisters
Hydesville, NY
- "raps" responded to
questions, spelled messages
- Spirits seeking to
communicate with friends
and family
- Fraud was later suggested,
but séance craze grew



Séance Phenomena

- Table tipping
- Automatic writing
- Speaking with 'spirit' voices
- Clairvoyant diagnoses
- Phantom hands or figures
- 'Apports' of objects
- Production of 'ectoplasm'



Wax hand moulds
produced by medium
Franek Kluski, Warsaw,
1920

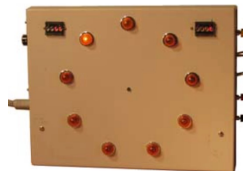
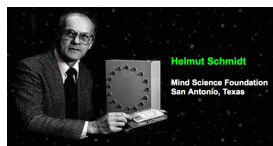


PARAPSYCHOLOGY

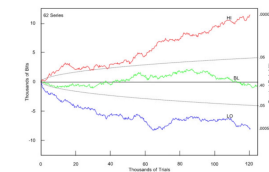
J B Rhine initiated experimental statistical studies of ESP and PK at Duke University in 1930s, leading to greater academic respectability but split between “life” and “lab” studies of psi.



Helmut Schmidt



Bob Jahn



Cumulative deviation of RDC/RNG (Random Event Generator/Random Number Generator) mean shifts achieved by conscious intention of one operator over some 175,000 experimental trials.

Bob Morris

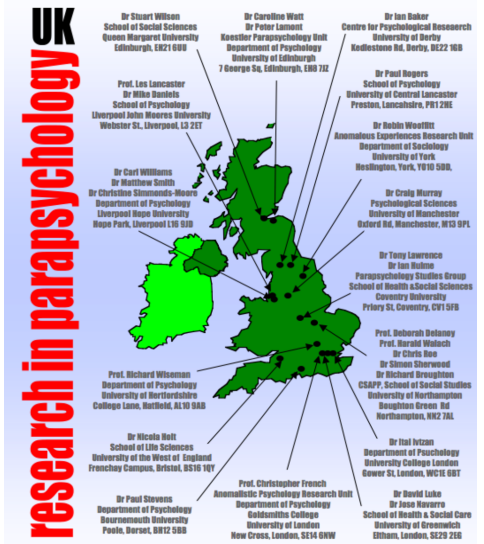


Proliferation parapsychology in UK began with his appointment to Koestler Chair in Edinburgh in 1985.

Morris served as President of the Psychology Section of the British Association for the Advancement of Science

2008

"Growth of UK academic parapsychology", *The Paranormal Review*, October 2008, 23-25.



UK SITUATION IN 2008

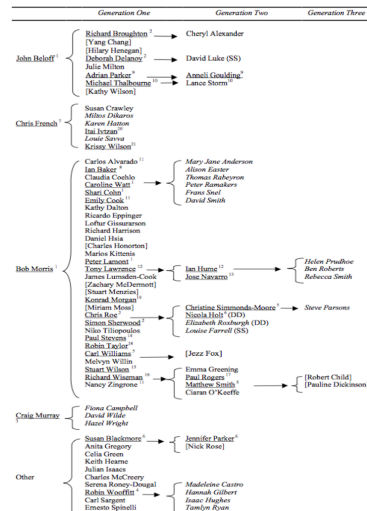
82 PhDs

22 permanent academics

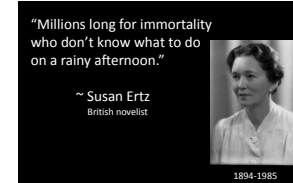
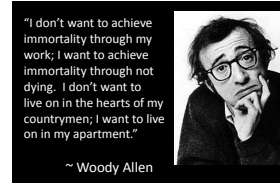
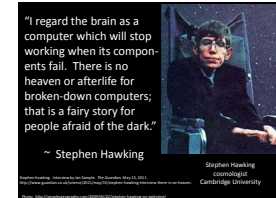
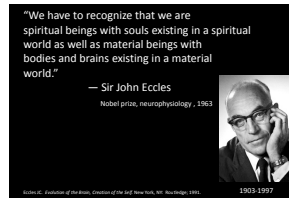
16 departments

4 professors

Bob Morris effect!



SURVIVAL?



SOME PERSONAL PRECOGNITIONS

Prime Minister dream (April 1976)



Two cases of morbid imagination and precognition

Bernard Carr and Kathy Korner
Psi Researcher No 10, July 1993 pp 5-6

BC's experience

During his visit to Cambridge Raymond informed me that he had received another psychic impression about me while meditating. He was not very precise over the details of his "vision" but he warned me that—on my forthcoming visit to America—I should not enter a pink building and that, if I did, I should on no account take the lift.

It was not until I visited Texas for a month in April 1979 that I found myself working in a pink building. This was the Physics Building at the University of Austin. Since my office was on the 9th floor, I was reluctant to avoid the lift altogether. However, being mindful of Raymond's warning, I decided to take the lift up but always walk down. The upward journeys were therefore made with a certain degree of trepidation—especially since notices indicated that there was trouble with some of the lifts! Nevertheless, nothing unpleasant happened (I did not even get stuck in one) and I was relieved to leave Austin unscathed.

KK's experience

I mentioned to him in one of my letters that I was spending Christmas in America with my family. I was due to leave at the end of November 1978 for five weeks. About five days before I left I received a letter from him. In the letter he said he dreamt that a younger woman and her mother were in an apartment in America and an outer door opened and a psychopath wearing a dark blue coat appeared and started to attack the older woman.

The night before I was due to return to Britain I was with my mother and father in their house (they live in a quiet suburban area) watching television. About 11 pm the door bell rang. We do have two doors at the front of our house, an outer door and a heavier inner door which my mother went to open. I remembered the dream then and started towards the door. There was a man with a dark blue coat with an axe—he was a neighbour, returning the axe which he had borrowed from my father that



12 May 2005

I had a vivid dream in which a cat had a tennis ball in its mouth. It then became a table tennis ball which it tried to swallow, after which it rolled around in great discomfort. I was trying work out the significance of this the next morning when I saw the above story about a catfish in *The Metro*.



March 2012

Strange dream in which Mari is trying to put a little dog into a letter box. The next morning I'm trying to work out where this dream came from when I noticed the story of a dog in *The Metro*.

May 2013

Strange dream after Esalen meeting about physics and consciousness.

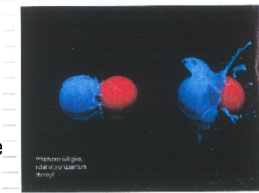
A blue train is stationary at platform. A red train is approaching at high speed on same line and railway worker in cap in front of blue train is distraught because the imminent collision is his fault.

The red train plows into the blue train.

Next morning I see *New Scientist* article about "collision" between quantum theory and relativity theory, illustrated by blue blob being splattered by red blob.

Where worlds collide

Which of our two great theories of reality is the right one? They could soon be slugging it out far above our heads, says Sophie Houlden



18 December 2015

In the early morning I dream of my former pet dog ("Pup", a white alsatian). He died 42 years ago and I'd not dreamt of him for decades. On getting up, I read emails and found an electronic Jacqui Lawson Xmas card from Rosemarie Pilkington (a member of the Survivalnet group) featuring a white dog. Brijji Waterfield has a dream the same morning in which her black dog ("Jesse") turns white and starts frothing at the mouth.



27 December 2015

Another dog dream involving a blue boxer puppy. The next morning I pick up the Sunday Telegraph and the front page features a boxer puppy which had been cloned from a dead dog. When I cut out the relevant part of the page, the back contained the phrase "Dream Bigger" on a blue background – an advert for Virgin Holidays. The dead dog's owner was Laura Jacques (cf. Jacqui Lawson).

