

Allen Fisher, Complexity Manifold: Talk two: draft notes and extensions

1.  
title page.
2.  
first diagram synopsis.
3.  
second diagram synopsis.

Résumé and review of talk one.

4.  
3-D Magnet Field computer simulation of Reversing Geodynamo. G.A. Glatzmaier and P.H. Roberts (1995) 'A three-dimensional self-consistent computer simulation of a geomagnetic field reversal', *Nature* 377, 203-209. Glatzmaier and Roberts are at Los Alamos National Laboratory and University of California, Los Angeles. See notes to Talks one.
5.  
C.A. Muses, idealised spatial representation for time and consciousness, *ARK* 40, 1966, 'Divination, Higher Consciousness and Mathematics'. See notes to Talks one.
6.  
Fig.23. in E.C. Zeeman, 'Differential equations for the heartbeat and nerve impulse', in C.H. Waddington (1972)(Ed.) *Towards a Theoretical Biology: 4: Essays*, Edinburgh: Edinburgh University Press. Republished with same figure number in E.C. Zeeman (1977, 1978) *Catastrophe Theory. Selected Papers 1972-1977*, Reading, Massachusetts: Addison-Wesley Publishing. See notes to Talks one.
7.  
Plate 1 Figure 1, an Omega Minus is produced in the British National 1.5m liquid hydrogen bubble chamber from C. Henderson (1970) *Cloud and Bubble Chambers*, London: Methuen & Co. See notes to Talks one.

In addition note the concept 'decoherence'.

- Jim Baggot (2004) *Beyond Measure. Modern Physics, Philosophy and the Meaning of Quantum Theory*, Oxford: Oxford University Press.
- M. Bell, K. Gottfried and M. Veltman (Editors)(2001) *John S. Bell on The Foundations of Quantum Mechanics*, (a collection of his papers), Singapore, New Jersey, London, Hong Kong: World Scientific.
- Roland Omnès (1999) *Understanding Quantum Mechanics*, New Jersey: Princeton University Press.

8.  
NASA slide via Finlay from *Voyager I*, Jupiter's satellite Io, revealing its volcanic caldera venting gasses. See notes to Talks one.

9.  
Allen Fisher, *October '87*, central panel from triptych, oil on canvas, 1987-88.  
Reproduced on [www.allenfisher.co.uk](http://www.allenfisher.co.uk) See notes to Talks one on left-hand panel.

## Talk Two

10.  
Kenneth Martin, *Drawing 2 from Group VII*, 1969-72, *Chance and Order, Drawings by Kenneth Martin*, (1973) London: Waddington Galleries.

11.  
Peter Lowe, *16 Stratified Cubes*, 1972 in Arts Council (1972-73) *Systems*, London.

12.  
Allen Fisher and Richard Miller, *To Decode This is the Least Important Thing*, 1972, in Allen Fisher (1975) *Prosyncel*, New York: Strange Faeces.

- Sophie Richard (2009) *Unconnected. The International Network of Conceptual Artists 1967-77. Dealers, Exhibitions and Public Collections*, London: Ridinghouse.

13.  
Allen Fisher, *Kessingland*, oil on canvas and hessian with *I Ching* sticks, 1978.  
Reproduced on [www.allenfisher.co.uk](http://www.allenfisher.co.uk)

- *Kessingland Studies*, Spanner, London, 1979, included prints from studies for the painting with poetry from *As Fast As Possible*.

14.  
Patterns of connectedness:  
using simulations from the inside of Polyomavirus at 25-Å (Ångström) resolution from James P. Griffith, Diana L. Griffith, Ivan Rayment, William T. Murakami & Donald L. D. Caspar (1992) 'Polyomavirus capsid and vision electron density maps computed by Fourier analysis', *Nature* 355, 6361, 1992.

- Polyomaviruses are a group of small, non-enveloped DNA viruses that can infect birds, rodents, and primates.
- See also: Elizabeth A. Hewat, Nuria Verdaguer, Ignacio Fita, Wendy Blakemore, Sharon Brookes, Andrew King, John Newman, Esteban Domingo, Mauricio G. Mateu and David I. Stuart (1997) 'Structure of the complex of a Fab fragment of a neutralizing antibody with foot-and-mouth disease virus: positioning of a highly mobile antigenic loop', *The EMBO (European Molecular Biology Organization) Journal*, 16, 1492-1500.
- Gregory Bateson (1979, 1980) *Mind and Nature, A Necessary Unity*,

London: Fontana/Collins.

- Carl Schuster and Edmund Carpenter (1996) *Patterns that Connect, Social Symbolism in Ancient and Tribal Art*, New York: Harry N. Abrams.
- 'Patterns of connectedness', as part of an aesthetic theory, was articulated in Allen Fisher, *Necessary Business*, Spanner, London, 1985 (1992 rewritten). Rewritten version in *Topological Shovel*, The Gig, Ontario, 1999 (including the 'Thumbnail Lecture', 'The Mathematics of Rimbaud', and 'Topological Shovel'.

15.

Shigeru Kondo and Rihito Asal (1995) 'A reaction-diffusion wave on the skin of the marine angelfish *Pomacanthus*', *Nature* 376, 765.

- Alan Turing (1952) 'The Chemical Basis of Morphogenesis' included in Copeland below.
- B. Jack Copeland (editor)(2004) *The Essential Turing. Seminal Writings in Computing, Logic, Philosophy, Artificial Intelligence, and Artificial Life*, Oxford: Clarendon.

16.

Canaletto, *View of the Ducal Palace in Venice*, c.1755, Uffizi Gallery, Florence.

17.

Jacopo de' Barbari, *Fra Luca Pacioli and Student*, 1495, Museo & Gallerie di Capodimonte, Naples.

18.

Blake, Carolyn (1997) *Glacier at Maloja Pass*, Upper Engadine, Switzerland.

- close to Friedrich Nietzsche's house at Lake Sils.

19. and 20.

Two views of Spiral staircase, Loretto Chapel, Santa Fe, 1877.

21.

Votive relief, A family sacrifices to Asklepios: in the background, the goddess Hygieia and a serpent descending a tree of the sacred grove; on the altar, fruit and honey cakes, c. 330 B.C. Figure 16 in C. Kerényi (1981) *Asklepios. Archetypal Image of the Physician's Existence*, translated by Ralph Manheim, New Jersey: Princeton University Press.

- Emma J. Edelstein and Ludwig Edelstein (1998) *Asclepius. Collection and Interpretation of the Testimonies*, Baltimore and London: The John Hopkins University Press.

22.

Palestinian column, 3<sup>rd</sup> century B.C., Vatican. J.R. Ward Perkins (1952) 'The Shrine of St.Peter and its Twelve Spiral Columns,' London: *Journal of Roman Studies*, Volume XLII.

- These columns are said to have been taken from King Solomon's Temple in Palestine, where they provided the entrance through which pregnant women would pass to encourage a healthy childbirth and between which the sick would prepare for healing. At least two of these columns are now in the Vatican and copies were made by Bernini to surround St. Peter's altar, in the chapel built to the proportions of King Solomon's Temple.
- it should be noted that these columns could not have been part of the original King Solomon's Temple, where the columns would have been made of wood partly plated in bronze.

23.

Raphael, detail from *The Healing of the Lame Man*, cartoon for tapestry, 1515-19, London: Victoria & Albert Museum.

- *The Raphael Cartoons* (1972) London: Victoria & Albert Museum.
- John K.G. Shearman (1972) *Raphael's Cartoon in the Royal Collection and the Leonine Tapestries in the Sistine Chapel*, London: Phaidon.

24.

Karl Blossfeldt, *Common Chili-nettle capsules (Cajophora lateritia)*, 1929, photogravure.

25.

Hogarth, *Self-Portrait with his Pug*, 1745, London, Tate Britain.

- Hogarth's 'line of beauty' on his palette.
- Hogarth, *The Analysis of Beauty*, 1753.

26.

Egyptian Christian Coptic Manuscript, *Michael Slays Dragon*, 11th Century A.D, British Library.

27.

Abtei Frauenwörth, S.George and the dragon, icon, 1600.

28.

Man punting a boat, C18th gravestone Kinnoul, Perthshire.

29.

Caspar David Friedrich, *Eismeer, The Sea of Ice*, (also known as *The Wreck of Hope*), 1823-4, [Kunsthalle Hamburg](#).

30.

J.M.W. Turner, *Rain, Steam Speed – The Great Western Railway*, 1844, National Gallery, London.

31.

Edvard Munch, *The Scream*, 1895 Lithograph, Munch Museum, Oslo.

32.  
Joe Rosenthal, 'Five marines and a sailor raise the US flag on Mount Suribach, WWII', photograph, 1945.
33.  
*Time* magazine, 04/02/02, Twin towers firemen raise flag in memory of colleagues killed at the site.
34.  
Allen Fisher, 'Boiled clock' from *creek in the ceiling beam*, part of *Blood Bone Brain*, c.1972. Photograph by Jude Walker.
35.  
El Lissitzky, *Beat the Whites with the Red Wedge*, 1919, poster.
36.  
Frank Stella, *The Pacific*, 1989, silkscreen, lithography and linoleum block with hand-colouring, marbling and collage. Frank Stella (1989) *The Waves, 1985-1989*, London: Waddington Graphics.
- titles after Herman Melville's *Moby Dick*.
37.  
Allen Fisher, *Rocket Window*, c.1990, watercolour and gouache on pasted papers.
38.  
Daniel Libeskind, detail of 1981 model from 'Berlin City Edge' project. Andreas Papadakis, Catherine Cooke and Andrew Benjamin (1989) *Deconstruction. Omnibus Edition*, London: Academy Editions.
39.  
Allen Fisher, Fibonacci cylinder 1, 2002.
40.  
Allen Fisher, Fibonacci cylinder 2, 2002.
41.  
J.S. Bach, Contrapuntus II from *Die Kunst der Fugue (The Art of Fugue)*, 1740s.
42.  
Allen Fisher, example Transcription from Bach's *Die Kunst der Fugue* for *The Art of Flight*, 1974.
43.  
Allen Fisher, example Translation from transcription to text for *The Art of Flight*, 1974.

44.

Allen Fisher, example Typescript from translation for *The Art of Flight*, 1974.

45.

Allen Fisher, *Paxton's Beacon*, 1976, Todmorden: Arc Publications.

46.

First sheet from Ferneyhough, *Time and Motion Study 1, Solo Bass Clarinet*, 1971, revised 1976-77, London: Peters Edition.

47.

Allen Fisher, example of Transcription from Brian Ferneyhough's *Time and Motion Study 1*, 1981.

48.

Allen Fisher, *Defamiliarising \_\_\_\_\_* \* , 1982, London: Spanner.

49.

Allen Fisher, notebook diagram three.