

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

1.
title page.

2.
second diagram synopsis.

Signals from talk one, ideal form and decoherence

3.
C.A. Muses, idealised spatial representation for time and consciousness, ARK 40, 1966, 'Divination, Higher Consciousness and Mathematics'. See notes to Talks one.

4.
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.

Talk Two

5.
Kenneth Martin, *Drawing 2 from Group VII, 1969-72, Chance and Order, Drawings by Kenneth Martin*, (1973) London: Waddington Galleries.

6.
Allen Fisher and Richard Miller, *To Decode This is the Least Important Thing*, 1972, in Allen Fisher (1975) *Prosyncel*, New York: Strange Fæces.

- Conceptual art came to the fore in Britain in 1969, *When Attitudes Become Form*, ICA; and in 1970, *projectsproposalsvision*, Midland Group Gallery, Nottingham; *Idea Structures*, Camden Arts Centre; and the *Wall Show*, Lisson Gallery, London.
- Sophie Richard (2009) *Unconnected. The International Network of Conceptual Artists 1967-77. Dealers, Exhibitions and Public Collections*, London: Ridinghouse.
- *Studio International*, v.180, no.924, 1970.

7.

Jasper Johns, *Weeping Women*, 1975, encaustic and collage on canvas, Private collection, New York. plate 168 in Crichton and different from that in Varnedoe.

- Michael Crichton (1977) *Jasper Johns*, New York: Harry N. Abrams. (The London exhibition was at the Hayward Gallery, June 21-July 30, 1978.)
- Kirk Varnedoe (1996) *Jasper Johns. A Retrospective*, New York: The Museum of Modern Art.

8.

Peter Lanyon, *Porthleven*, 1951, oil on board, Tate Gallery, photograph by AF.

- Chris Stephens (2000) *Peter Lanyon. At the Edge of Landscape*, London: 21 Publishing.
- *Peter Lanyon at Tate St. Ives* (2010) Chris Stephens curator, London: Tate Publishing.

9.

Allen Fisher, *Kessingland*, oil on canvas and hessian with *I Ching* sticks, 1978. Reproduced on www.allenfisher.co.uk

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

10.

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 æsthetic 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').
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11.

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

- The marine angelfish, *Pomacanthus* has stripe patterns which are not fixed in their skin. Unlike mammal skin patterns, which simply enlarge proportionally during their body growth, the stripes of *Pomacanthus* maintain the spaces between the lines by the continuous rearrangement of the patterns. Although the pattern alteration varies depending on the conformation of the stripes, a simulation program based on a Turing system can correctly predict future patterns. The striking similarity between the actual and simulated pattern rearrangement strongly suggests that a reaction-diffusion wave is a viable mechanism for the stripe pattern of *Pomacanthus*.
- 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.
- D'Arcy Wentworth Thompson (1917 revised and then abridged 1966) *On Growth and Form*, edited by J.T. Bonner, Cambridge &c.: Cambridge University Press.

12.

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

13.

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

- In 1494 Pacioli issued the book, *The Sum of arithmetic's, geometry, doctrine about proportions and relations*. One of the book sections is a continuation of Fibonacci's *Liber abaci* (1202). In 1509 he published *De Divine Proportione*. dedicated to the 'golden section'. The book is illustrated by 60 figures probably factured by Leonardo da Vinci.
- Pacioli deduces 12 different properties of the golden section in relation to Plato's ideas of 'State', 'Laws', and 'Time'. He proposes that the given proportion is a universal relation expressing a perfection of beauty in nature and in art which he calls 'Divine Proportion' and is considers it to be 'instrument of thinking", an 'aesthetic canon', and the 'Main Principle of the Universe'.

14.

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

- close to Friedrich Nietzsche's house at Lake Sils.
- I derived the conceit of *frenzy and self-control* from Nietzsche's archaic ideas in *The Birth of Tragedy* (1872).

15. and 16.

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

17.

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.

18.

Palestinian column, 3rd 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.

19.

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.

20.

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

21.

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

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

22.

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

23.

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

24.

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

25.

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

26.

Joe Rosenthal, 'Five marines and a sailor raise the US flag on Mount Suribach, WWII', photograph, 1945.

27.

Allen Fisher, Fibonacci cylinder 1, 2002.

28.

Allen Fisher, Fibonacci cylinder 2, 2002.

29.

J.S. Bach, Contrapuntus II from *Die Kunst der Fugue (The Art of Fugue)*, 1740s.

30.

Allen Fisher, example Transcription from Bach's *Die Kunst der Fugue* for *The Art of Flight*, 1974.

31.

Allen Fisher, example Translation from transcription to text for *The Art of Flight*, 1974.

32.

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

33.

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

34.

Allen Fisher, *Defamiliarising _____* * , 1982, London: Spanner.

- The structure of *Defamiliarising _____* * derived from Brian Ferneyhough's *Time and Motions Study I*, for solo bass clarinet (1971-77).