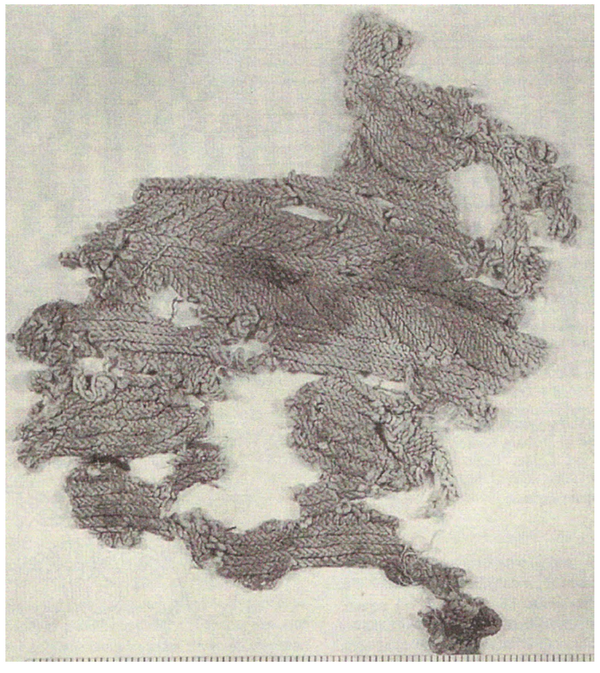
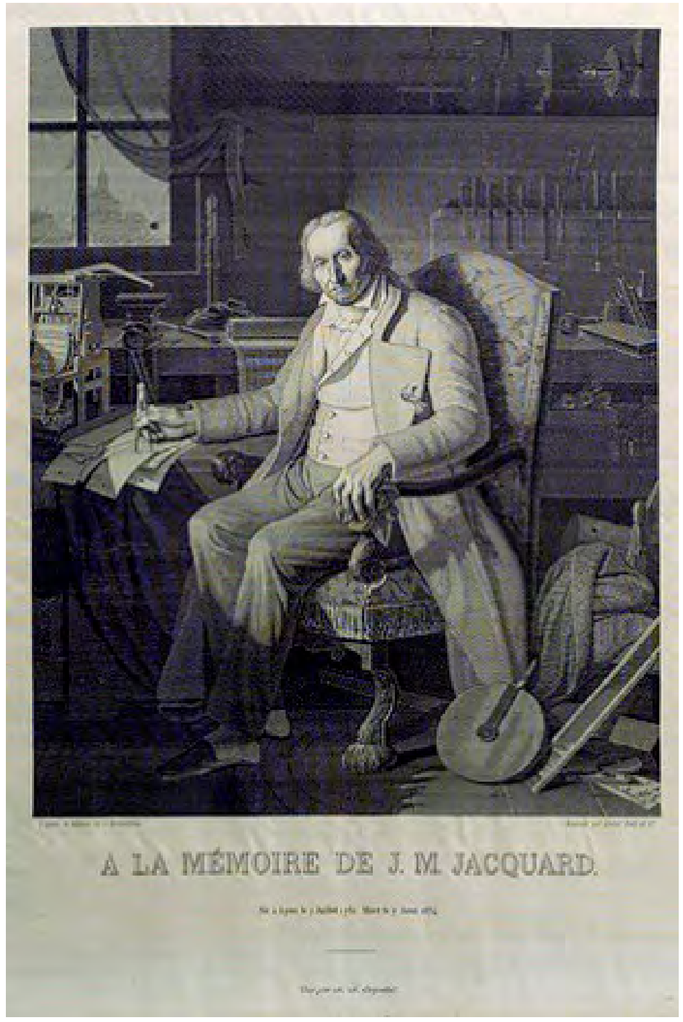
Saul Griffith www.otherlab.com

(in)Complete History of Digital Fabrication

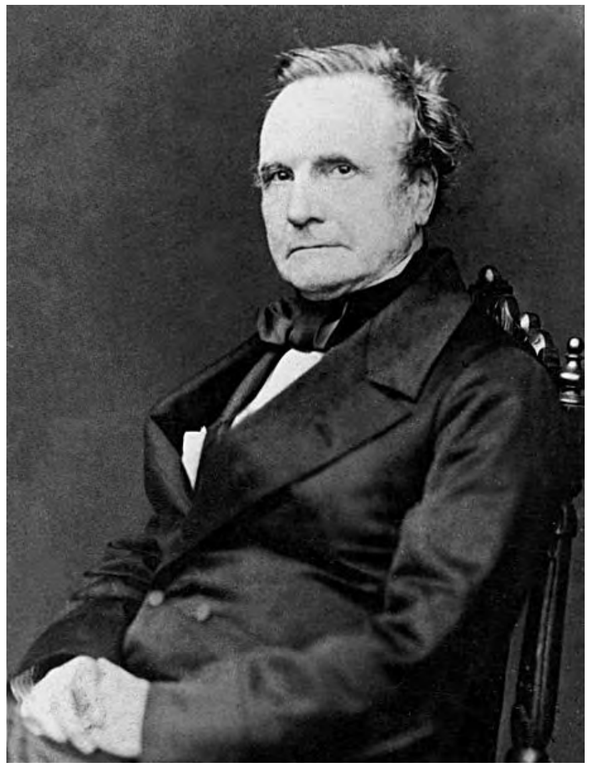
knitting ~ 1000AD

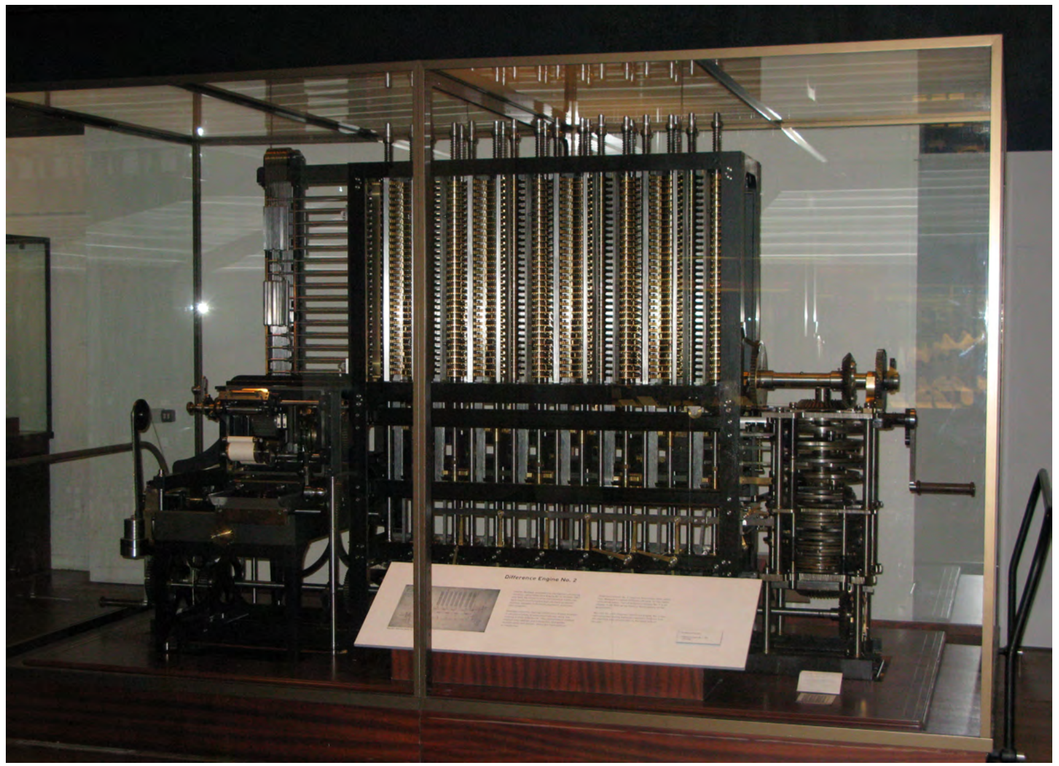


jacquard - 1801



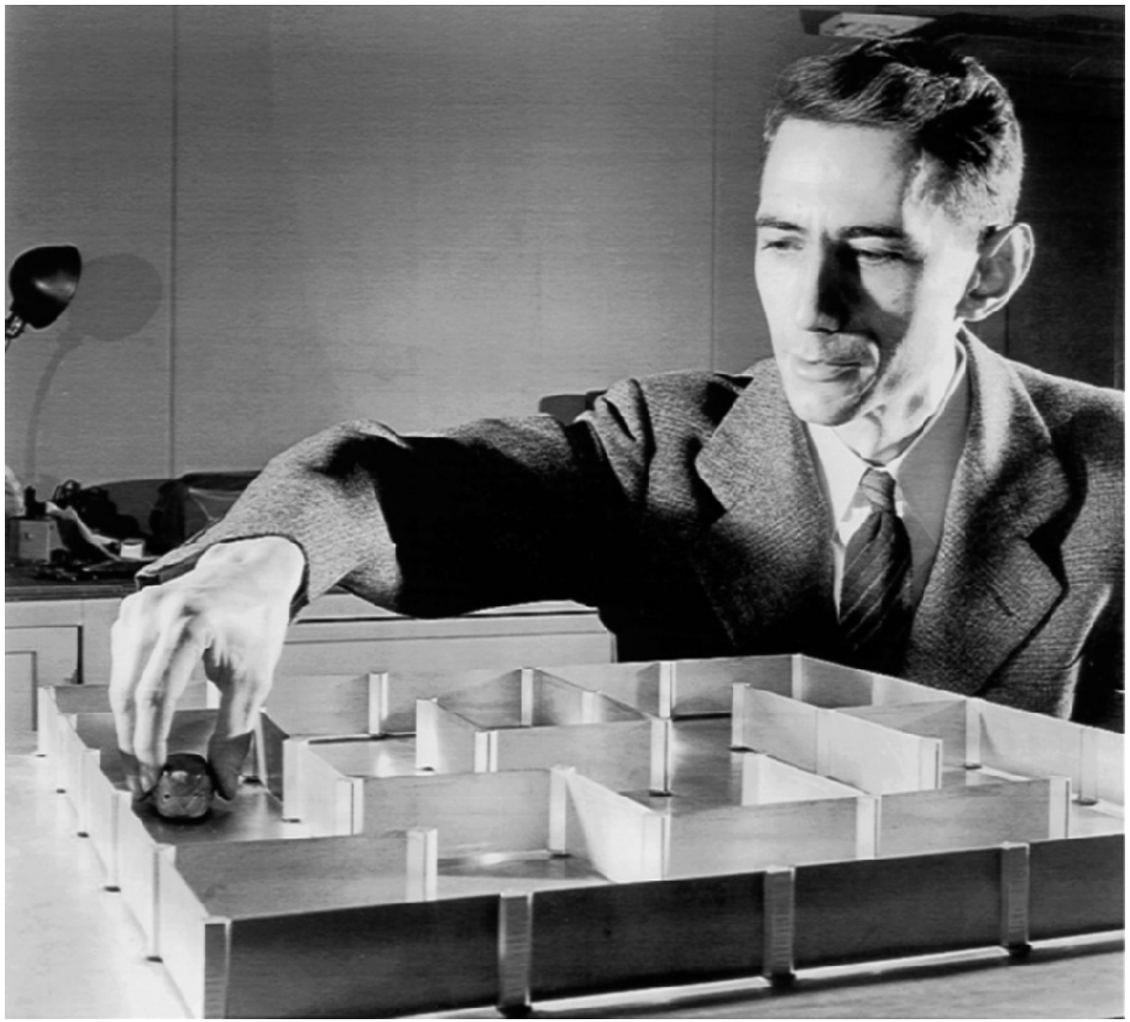
babbage, lovelace, ~1820.



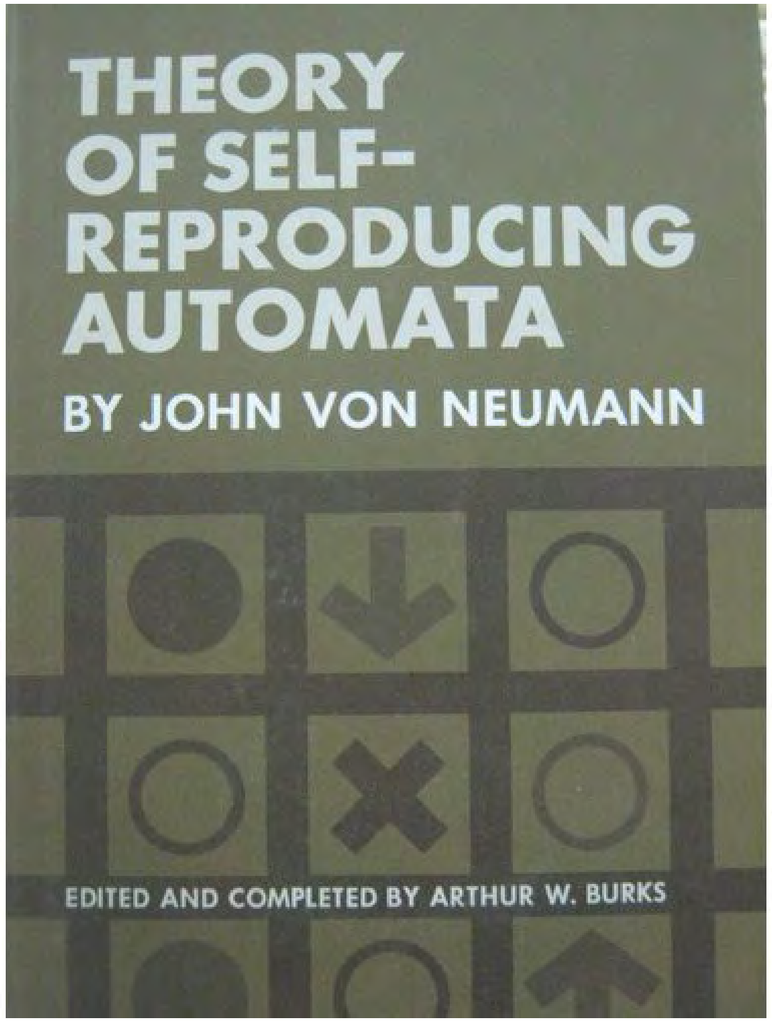


Turing ~1936

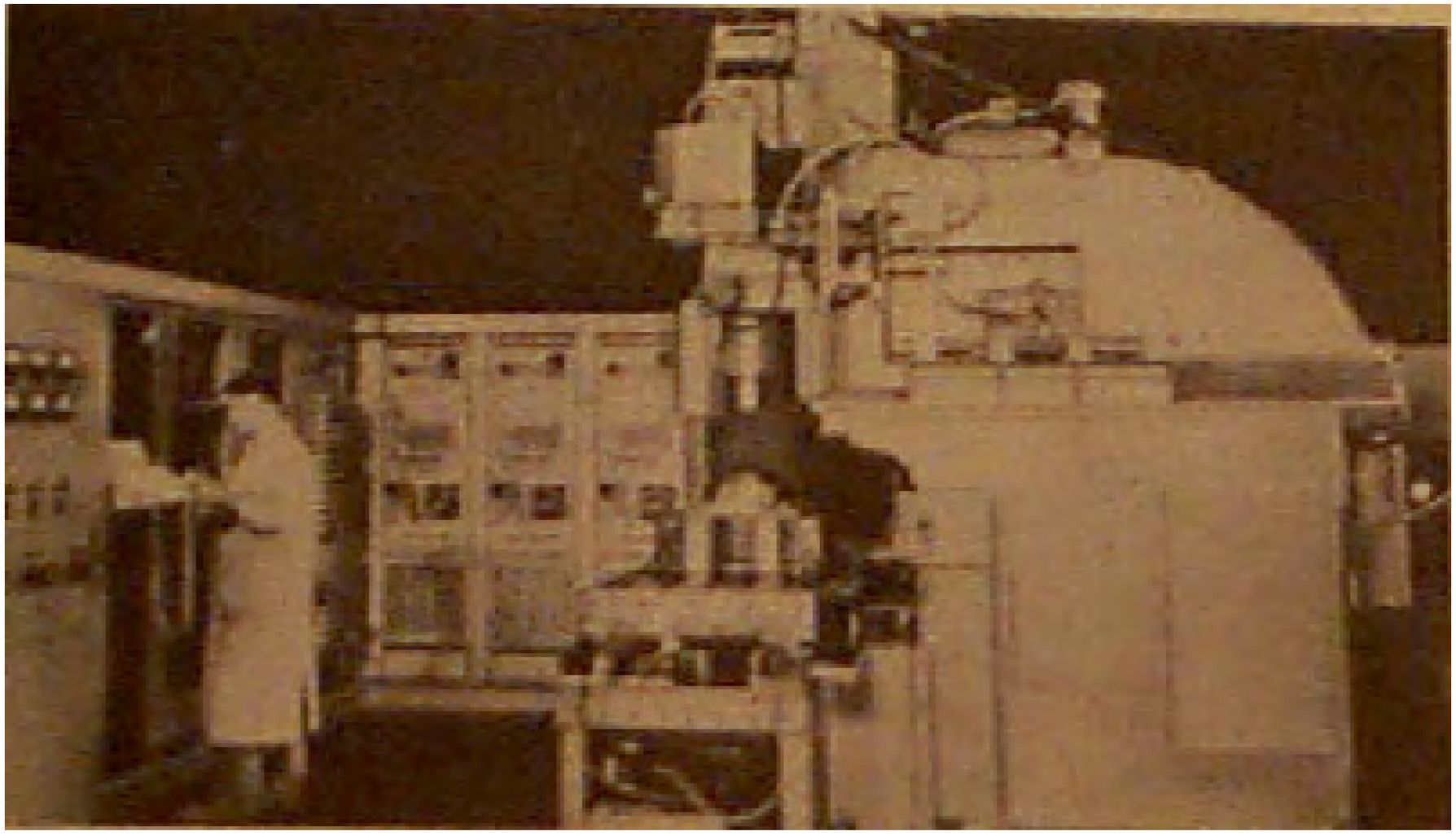
shannon ~1948



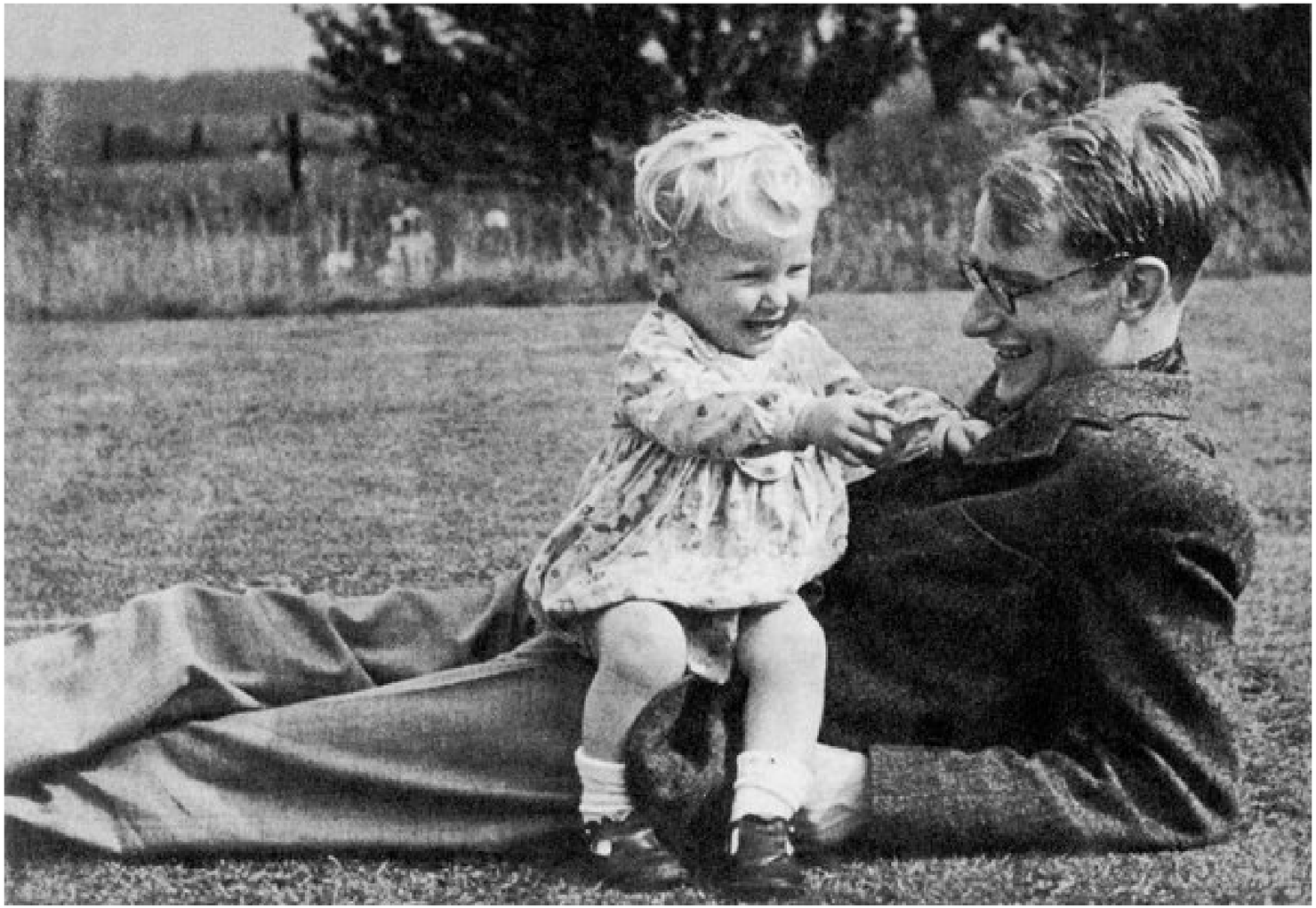
von-neumann


THEORY
OF SELF-
REPRODUCING
AUTOMATA
BY JOHN VON NEUMANN
EDITED AND COMPLETED BY ARTHUR W. BURKS

John T Parsons, and MIT
CNC - 1949



watson-crick ~1953

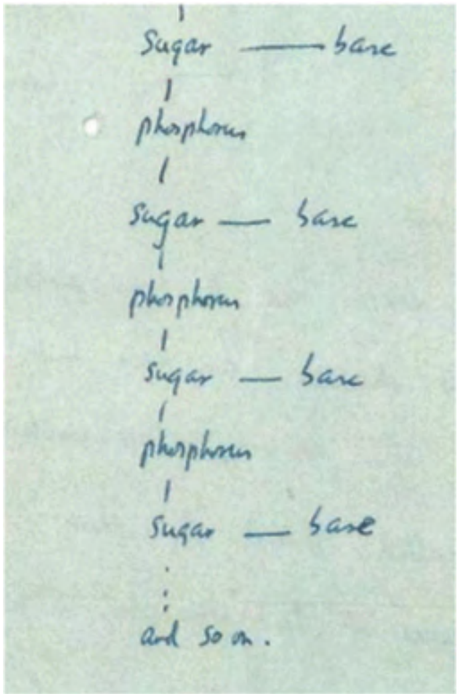


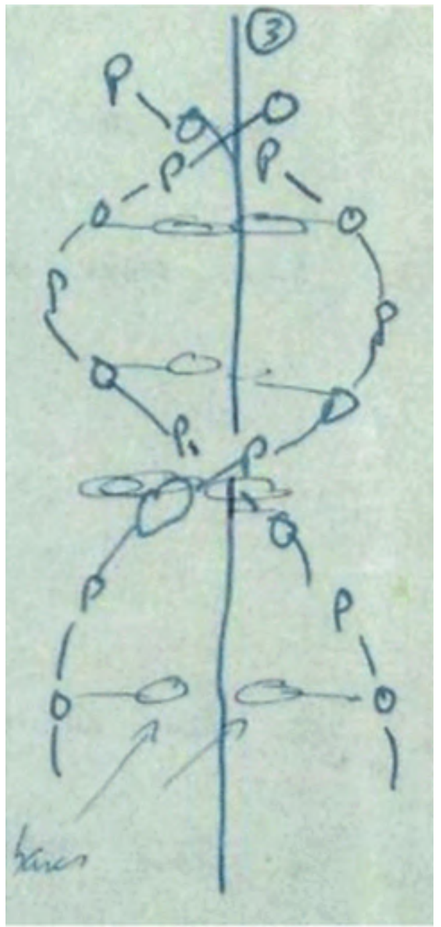
19 Portugal Place
Cambridge.
16 March '53

My Dear Medical.

Jim Watson and I have probably made a most important discovery. We have built a model for the structure of deoxy-ribose-nucleic-acid (read it carefully) called D.N.A. for short. You may remember that the genes of the chromosomes - which carry the hereditary factors - are made up of protein and D.N.A.

Our structure is very beautiful. D.N.A. can be thought of roughly as a very long chain with flat bits sticking out. The flat bits are called the "bases". The formula is rather





penrose (lionel) 1959

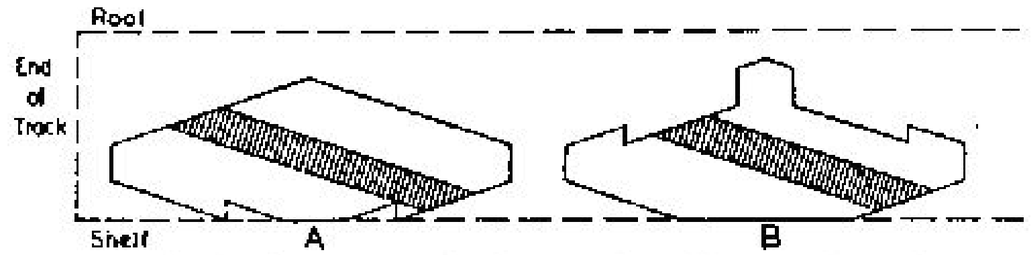


Fig. 1. Elements A and B in neutral positions on the track

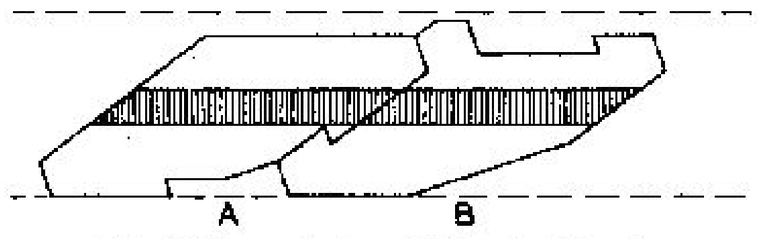


Fig. 2. Elements A and B hooked together

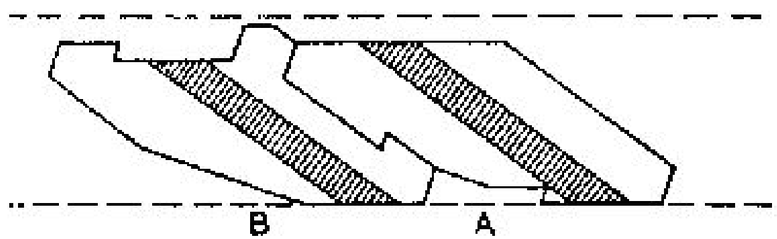
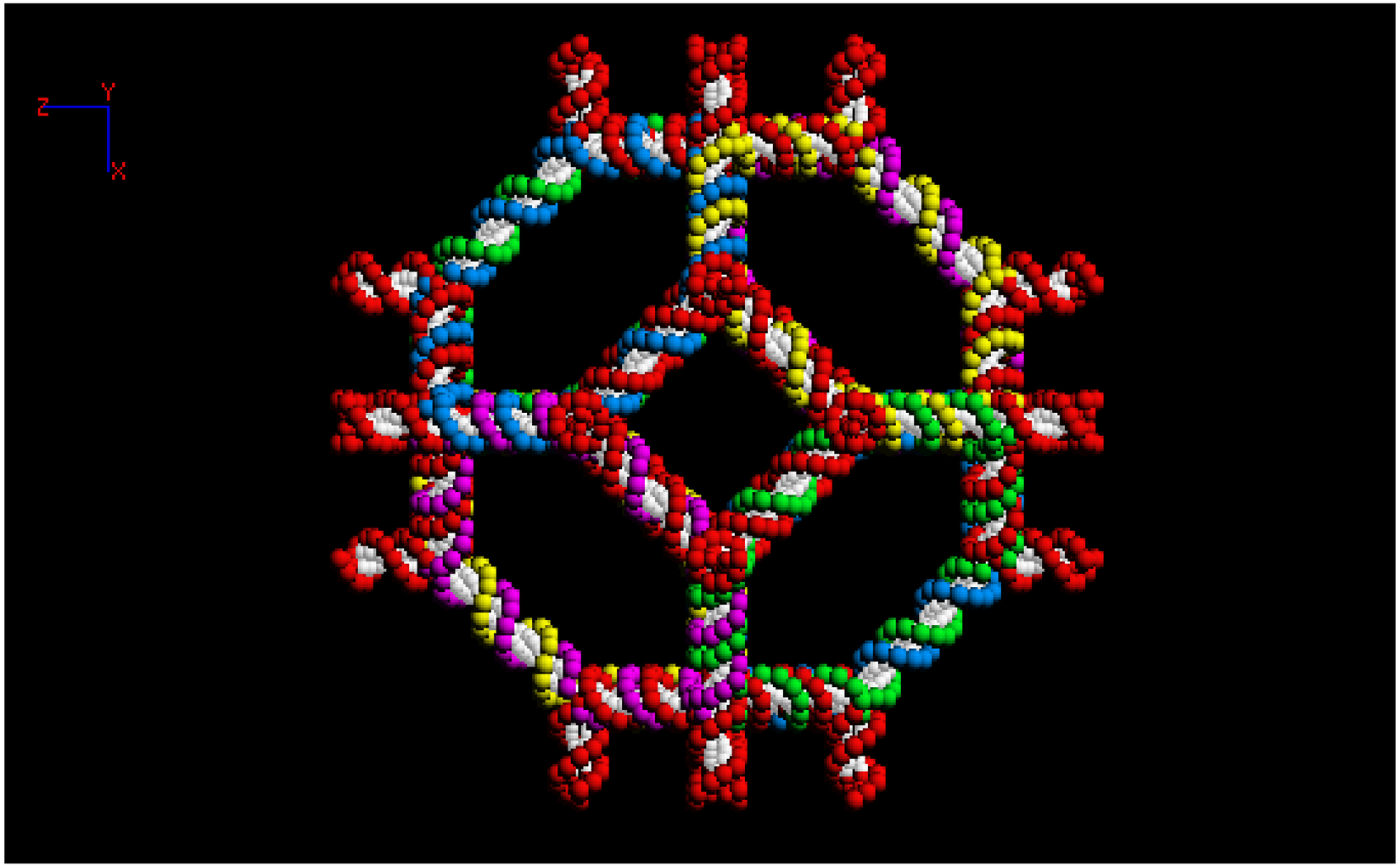


Fig. 3. Alternative complex of B and A.

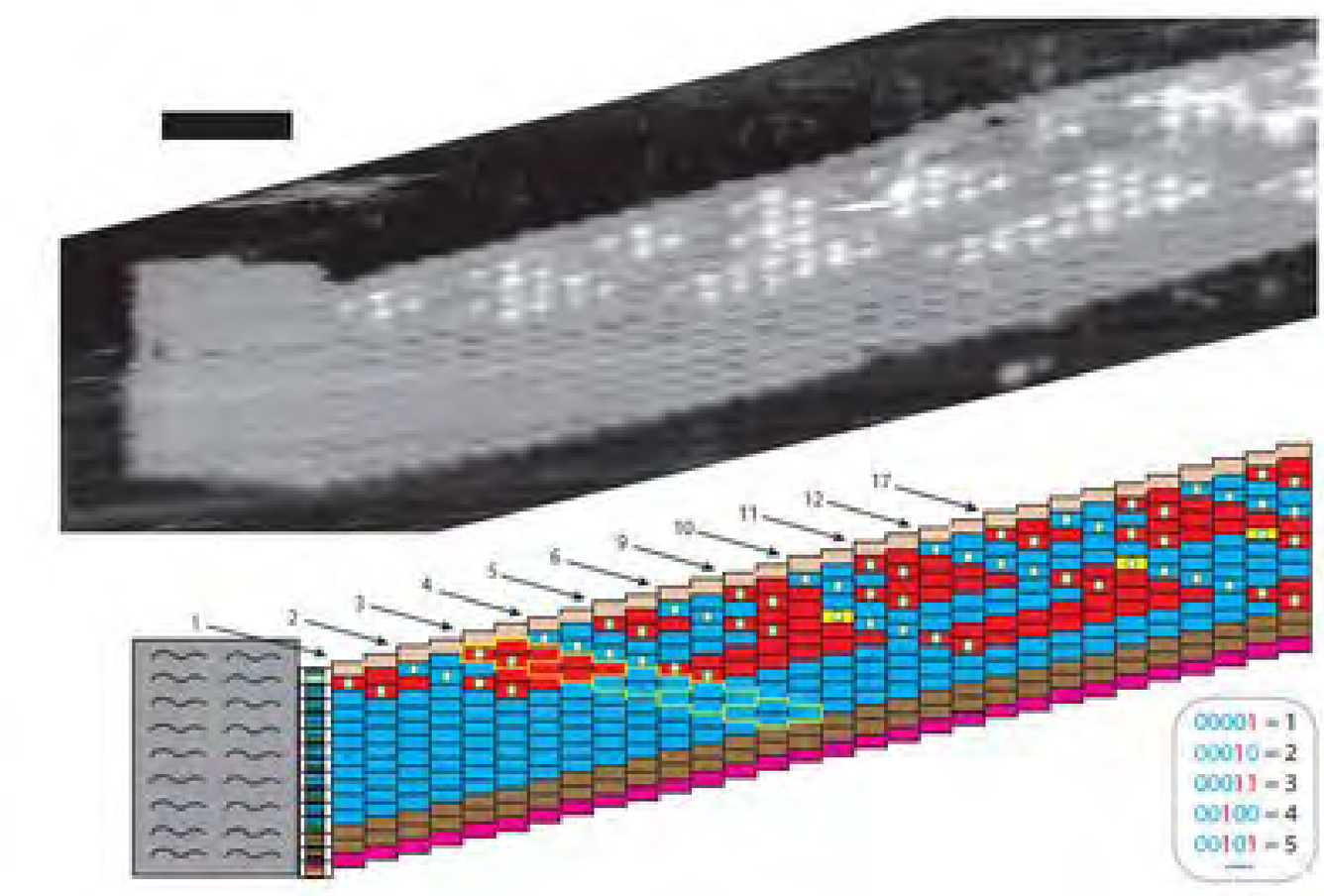

Galton Laboratory
University College
London
presents

Charles Hull 1984

Ned Seeman



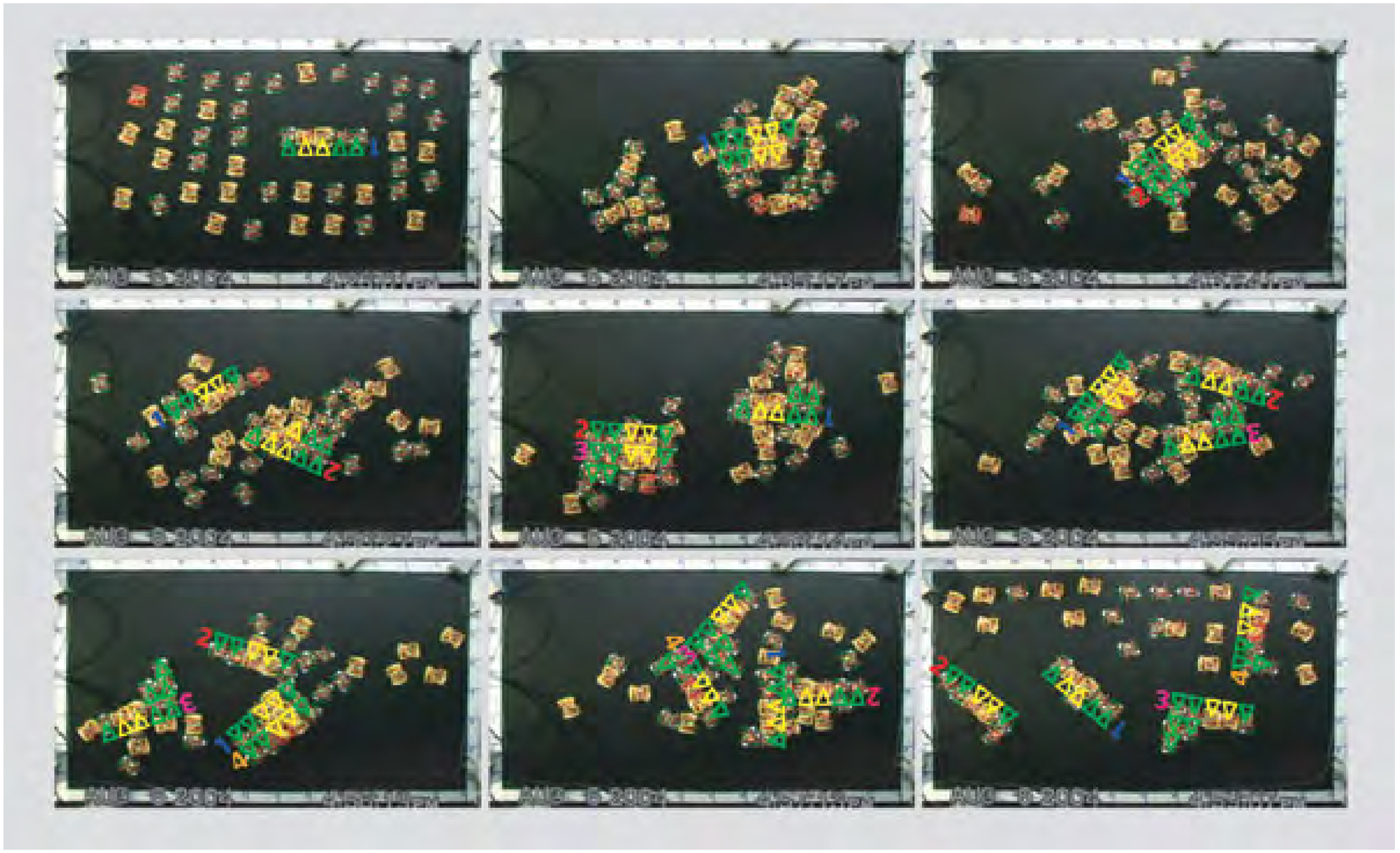
Winfree



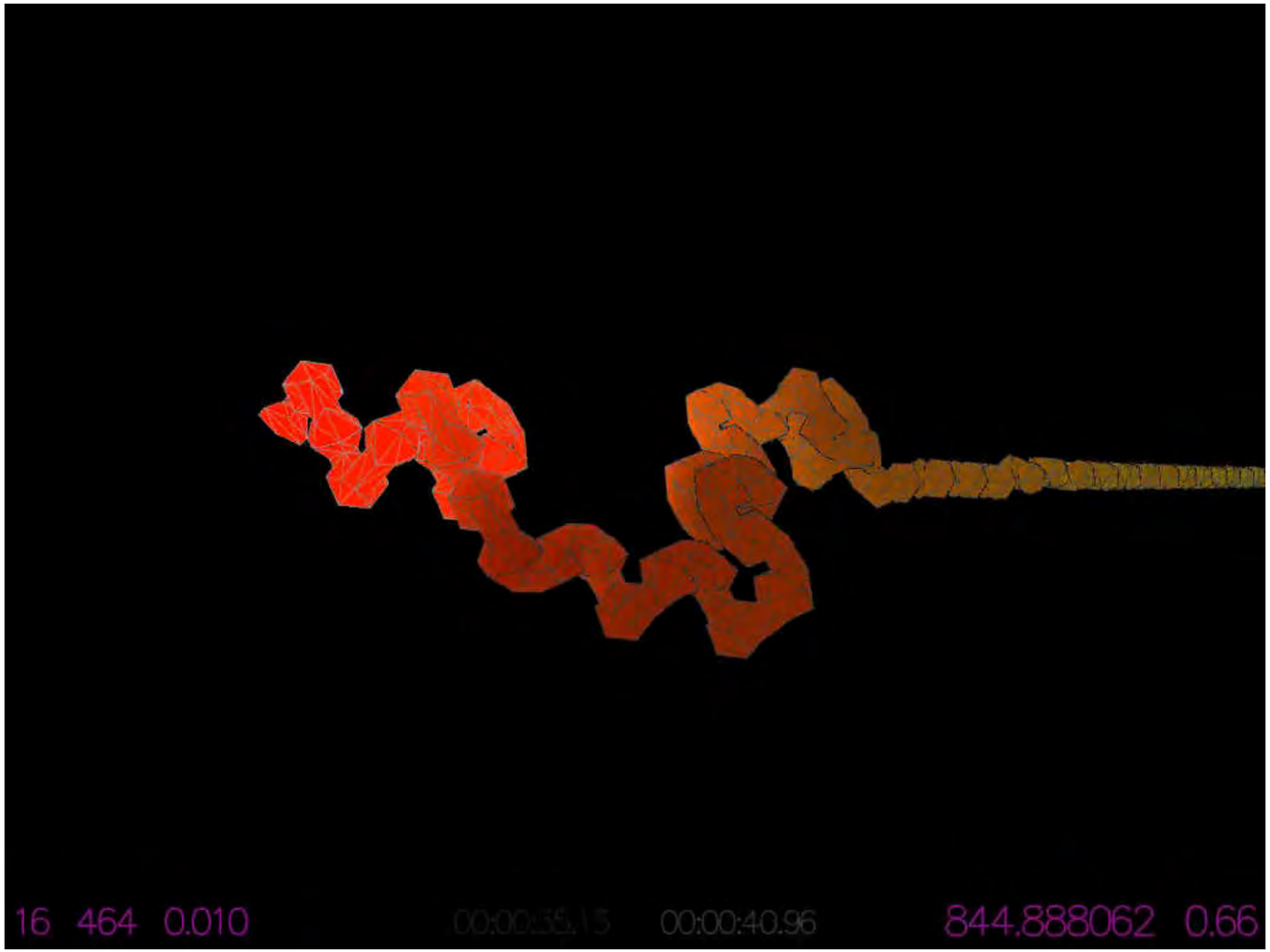
Jacobson, Gershenfeld :

THE CENTER FOR
BITS AND ATOMS
Massachusetts Institute of Technology

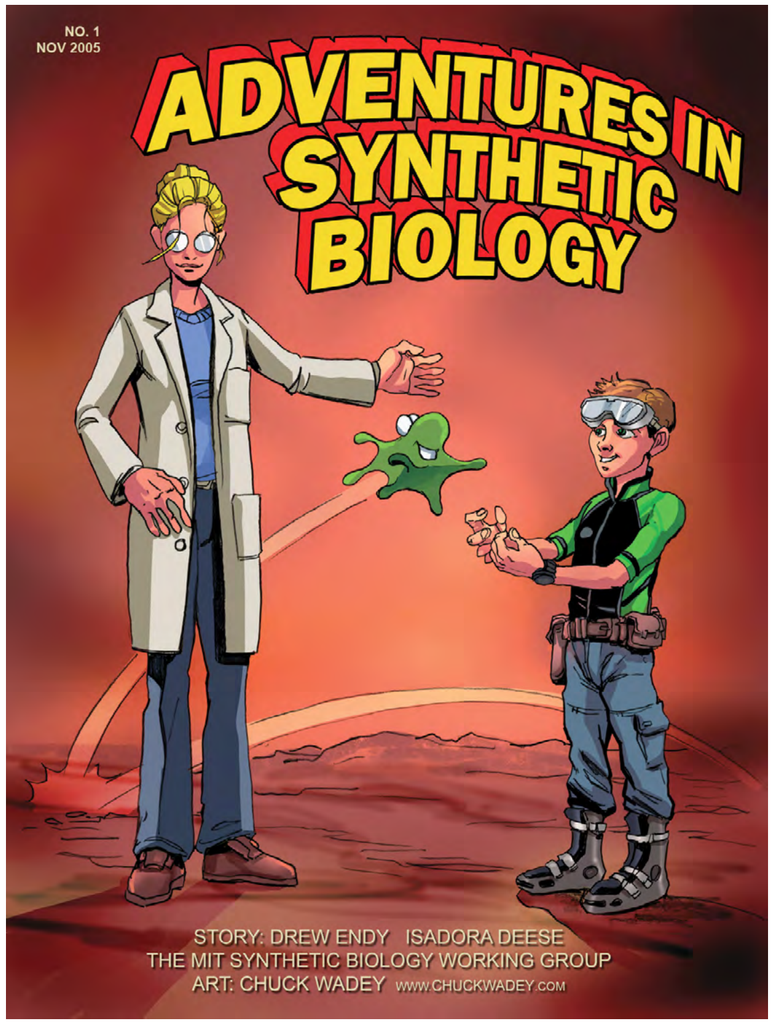
Griffith



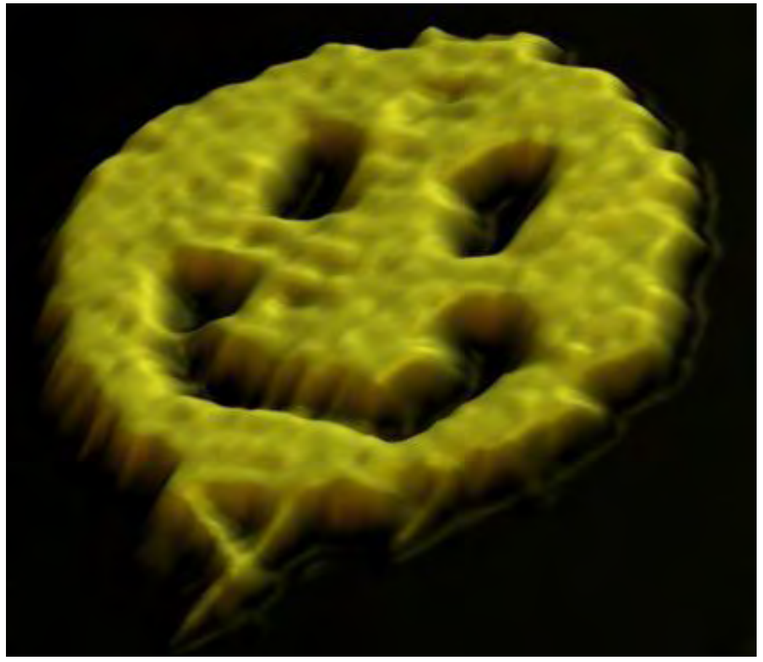
Cheung, Demaine, Griffith, Bachrach

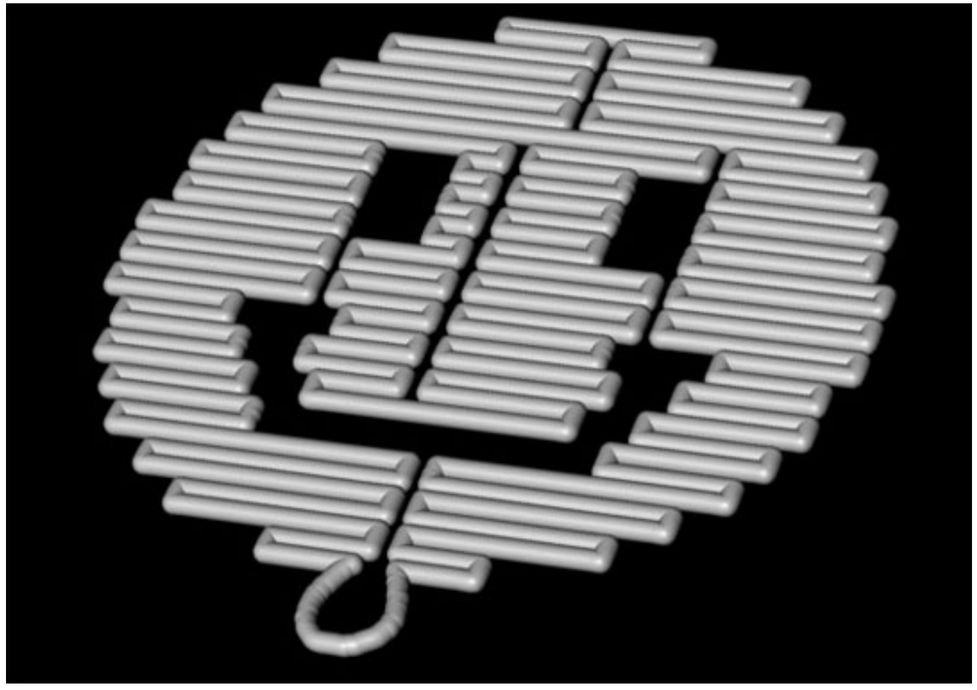


Knight, Endy, et.al



Rothemund





information + stuff = awesome