

The Cartography of Cancer as a Complex System

Simeon Nelson

I am working on a Wellcome Trust funded residency and commission for the new Macmillan Cancer Centre in London. The funding is to enhance understandings of cancer among patients, doctors and the public. I am interested in the analogies between landscape, geography and anatomy. From a systems point of view, the body system can be conflated with a geographical system. Complexity theory is an inherently integrative way of looking at apparently disparate phenomena, from the stock market to social change, from cancer to population dynamics and epidemiology. By generating the art-work through the visual patterns of complexity theory, cancer's analogical aspects may be linked to social and cultural systems. I am questioning isomorphisms between the growth patterns and interactions of cities, vegetation cover, animal populations etc and cancer. It is a primary aim of the art-work to draw out and test comparisons between these patterns.

As the first part of this work I have produced a series of urban maps based on illustrations of tumour growth and the way they co-opt the body's blood supply, generating new veins to supply their exponential growth. I am making an explicit analogy here between tumour growth and the growth of a town into the surrounding country-side. I am also working on drawings that show the healing effect of therapies on cancer which depict the city being reabsorbed into the natural world. The cartographic aesthetic I have used is from maps of London's suburban growth before the age of mass transit in the 17th and 18th centuries.

From these I will work with programmers to develop an algorithmic iterative screen based works that depict the process of cancer growth and decline within the body via the analogy of urban interaction with the natural world.

<http://anarchyintheorganism.tumblr.com/>

<http://blogs.herts.ac.uk/research/2011/07/26/artist-to-portray-cancer-in-a-new-way/>

<http://simeon-nelson.com/currentwork.html>