

Classical Computer Science in the World of Pure Experience

This poster was devised by Meurig Beynon for presentation at the *Workshop on Philosophy of the Information and Computing Sciences* at the NIAS/Lorentz Center, Leiden, February 8-12, 2010.

The quotations are from William James (1842-1910), primarily from his *Essays in Radical Empiricism*, first published in 1910.

Empirical Modelling (EM) is an approach to a science of computing that puts its primary emphasis on the experiential and epistemological aspects of practical computing. It has involved the development of principles and tools with wide potential applications. For more details, see the EM website at <http://www.dcs.warwick.ac.uk/modelling/>.

The foreground screenshot is taken from a model constructed by Jaratsri Rungrattanaubol (2001). The model itself can be found in the EM archive at <http://empublic.dcs.warwick.ac.uk/projects/>. It was constructed using a variant of the EDEN interpreter, as principally developed by Yun Wai Yung, Yun Pui Yung and Ashley Ward.

The net of dependencies was drawn using the Dependency Modelling Tool developed by Kai Tung Allan Wong (2003).

More about the motivation behind the construction of the heapsort model can be found in the paper:

W.M.Beynon, J. Rungrattanaubol and J. Sinclair. Formal Specification from an Observation-Oriented Perspective. *Journal of Universal Computer Science*, Vol. 6 (4), 407-421, 2000.

The backdrop to the screenshot is an image of British Empire Panel (No.13 / Asia) by Sir Frank Brangwyn R.A (1867-1956) - one of the seventeen-panel sequence of paintings in the Brangwyn Hall, the concert/conference venue within the Guildhall, Swansea. This image can be found on the web at the url: http://www.swanseaheritage.net/article/gat.asp?ARTICLE_ID=1797 .

Affinities between radical empiricism and Empirical Modelling are discussed in:

W.M.Beynon. Radical Empiricism, Empirical Modelling and the nature of knowing. In (ed. Itiel E. Dror) *Cognitive Technologies and the Pragmatics of Cognition: Special Issue of Pragmatics and Cognition*, 13:3, December 2005, 615-646.