Maximising Research Capacity & Quality in Digital

Dr James Smithies

@jamessmithies
james.smithies@kcl.ac.uk

Current research

The Digital Humanities & the Digital Modern (Palgrave Macmillan, 2017).

- Reflexive Modernity (Anthony Giddens et al).

We need to develop critical theories that can help us both understand digital media & culture and build working digital tools / products.

- Postphenomenology (Donald Ihde, Peter-Paul Verbeek et al).

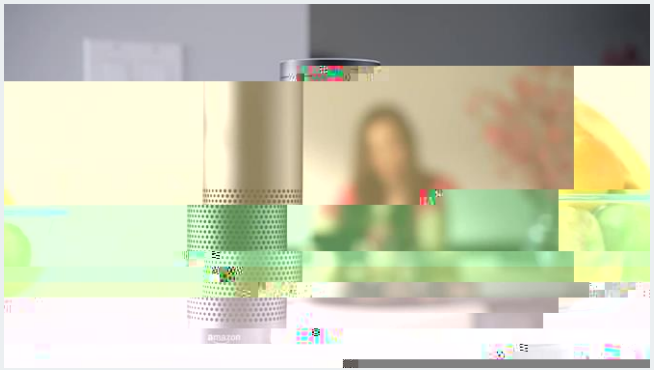
Future research

The Epistemology of the Machine.

- An exploration of how humans have used machines, over the long-term, to construct knowledge and meaning.
- Antikythera mechanism / Chinese water clocks >> Digital Humanities / eResearch / High Performance Computing / AI.

The Antikythera mechanism (Fragment A front), 150-100 BC.

The IBM Blue Gene/P "Intrepid" supercomputer, Argonne National Laboratory.



But why focus on laboratories?

Laboratories are key sites in the construction of knowledge, and hence meaning.
Scientists worked out what they are, and how they work best, 100 years ago.
Humanists and social scientists are still working that out. The better we understand it, the better our labs (and the knowledge & meaning they produce) will be.

James Gillray, Scientific Researches. New Discoveries in Pneumatics, 1802. National Portrait Gallery, London.

Molecular Biology Technics Laboratory at Faculty of Biology of Adam Mickiewicz University in Poznan (*Wikipedia)*.

We must not only search for, and procure a greater number of experiments, but also introduce a completely different method, order, and progress of continuing and promoting experience. For vague and arbitrary experience is (as we have observed), mere groping in the dark, and rather astonishes than instructs. But when experience shall proceed regularly and uninterruptedly by a determined rule, we may entertain better hopes of the sciences.

Francis Bacon, *Novum Organum*, 1620.

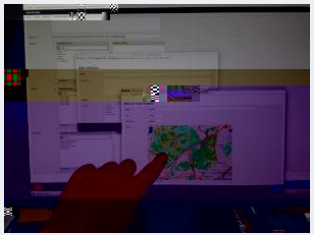
Robert

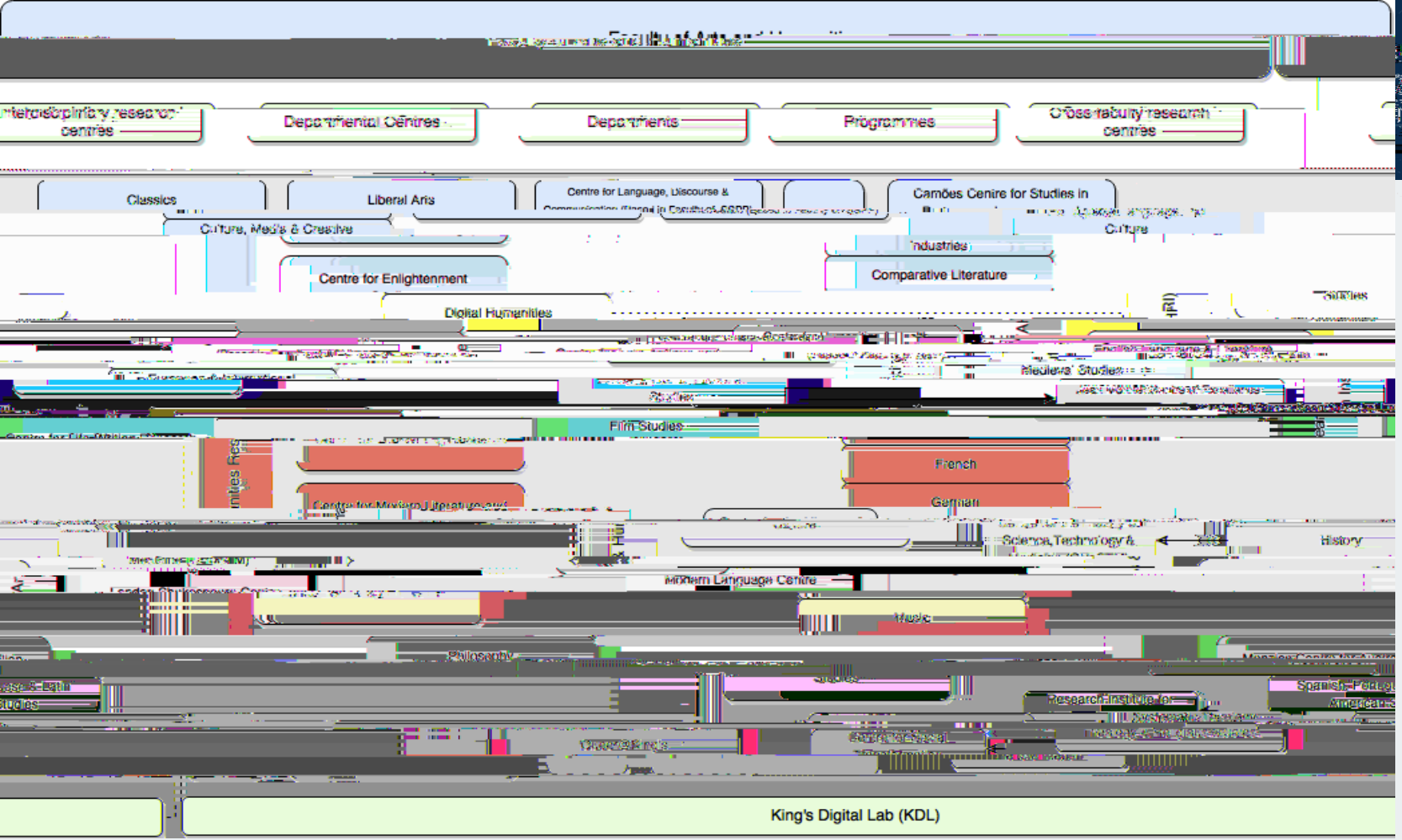
Isis

The evolution of KDL

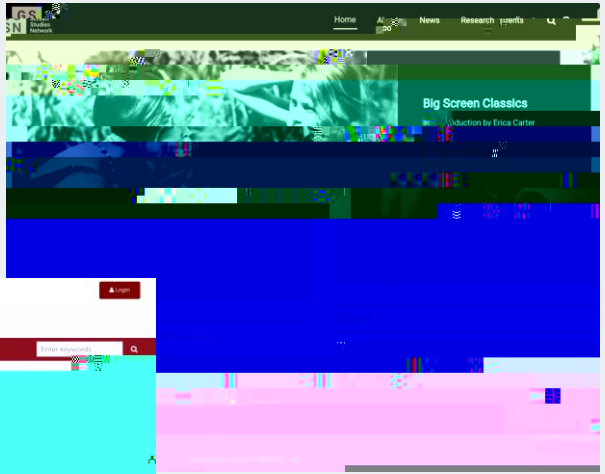
30 years of activity, against a background of rapid innovation and change in Humanities Computing and Digital Humanities.
Centre for Computing and the Humanities (1991); Centre for eResearch

Established 2015. See https://www.kdl.kcl.ac.uk/blog/kdl-launch/.
12 permanent staff: Director, Deputy-Director, Project Manager, 3 Analysts, 4 Software Engineer, 2 UI/UX Developers, 1 Systems Manager. 1 contract analyst.
Research Affiliates / Visiting Fellows.
~200 virtual machines, ~1TB RAM, ~45TB data.
~100 inherited projects, 20 ongoing. ~5 million digital objects.
8 countries of origin, 11 languages.
Supported by external funding, under-written internally.

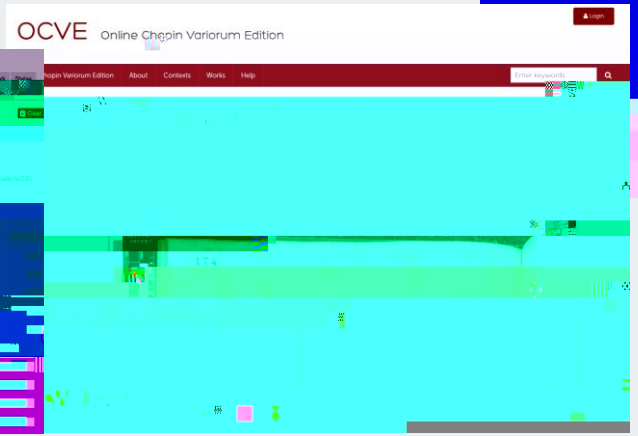



Departmental Centres
Departments
Programmes
Classics
Liberal Arts
Culture, Media & Creative
Centre for Enlightenment
Comparative Literature
Digital Humanities
Film Studies
French
German
History
Modern Language Centre
Music
Philosophy
King's Digital Lab (KDL)

http://www.finerollshenry3.org.uk

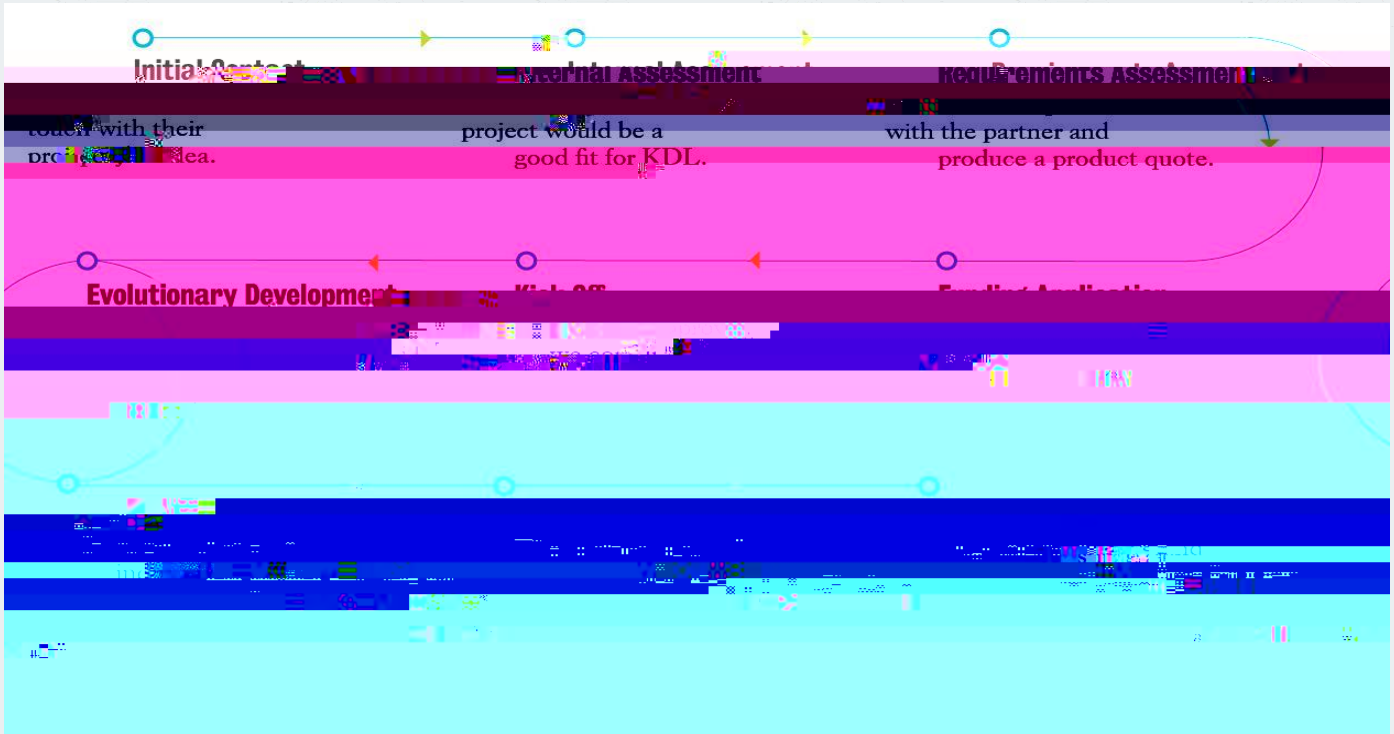


http://www.chopinonline.ac.uk



http://germanscreenstudies.eu

http://www.aemap.ac.uk


project would be a
good fit for KDL.
with the partner and
produce a product quote.

Digital Labs as Socio-technical System

What *is* a digital (RSE) lab, and how might we try to understand them?