

Technology, law, policy and the public domain

COMMUNIA conference

“Technology and the public domain”

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Rishab Aiyer Ghosh (ghosh@merit.unu.edu)

United Nations University / MERIT, Maastricht

prescriptive?

lessons learnt?

Collaboration in history



James Watt, Lean's Reporter and the Cornish Pumping Engine

James Watt: story

James Watt's improved steam engine... was the key innovation that brought forth the Industrial Revolution. ... it gave us the modern world. A key feature of it was that it brought the engine out of the remote coal fields into factories where many mechanics, engineers, and even **tinkerers** were exposed to its virtues and limitations. **It was a platform for generations of inventive men to improve.**

--Wikipedia

James Watt: history

James Watt ... increased capacity of steam engines from 10 million pounds to 18 million pounds... Patented his steam condenser... lobbied Parliament to extend his patent's lifetime from 14 to 31 years... block competing (better) inventions and thus stalled innovation for decades.

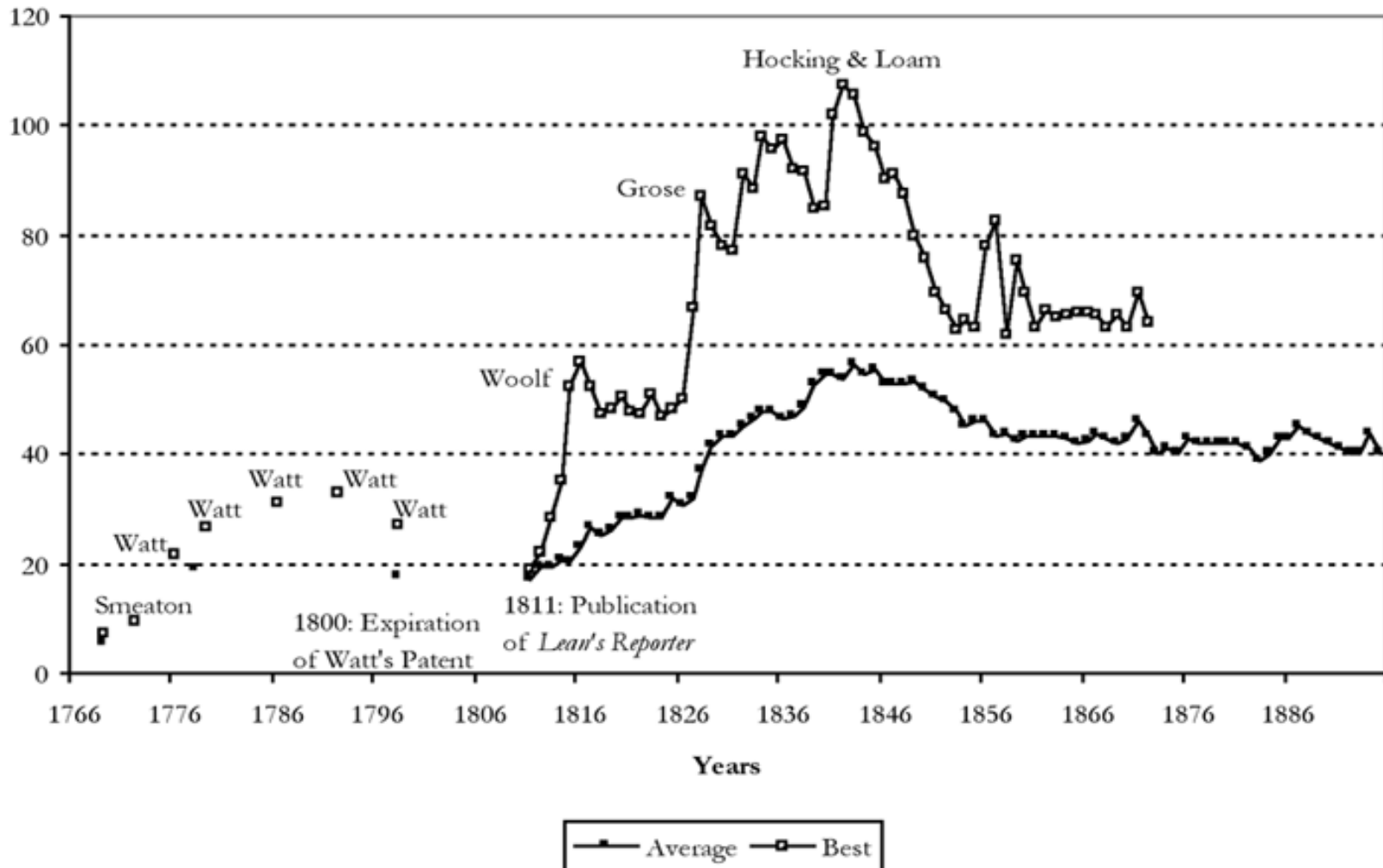
paraphrased from Nuvolari, A., 2004.

"Collective invention during the British Industrial Revolution: The case of the Cornish Pumping Engine,"

Cambridge Journal of Economics, volume 28, number 3, pp. 347–363.

Progress?

Nuvolari, A., 2005. "Open source software development: Some historical perspectives". *First Monday*, 10:10



“Duty” or efficiency of steam engines

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1811 *Lean's Reporter*

Monthly journal published by Cornish miners – the main user-developers of steam engines

Published the full specifications of each improved engine, so they could be copied

Improvements, performance skyrocketed

New inventors (Trevithick, Woolf...) avoided patents, releasing specifications publicly

185 years later...

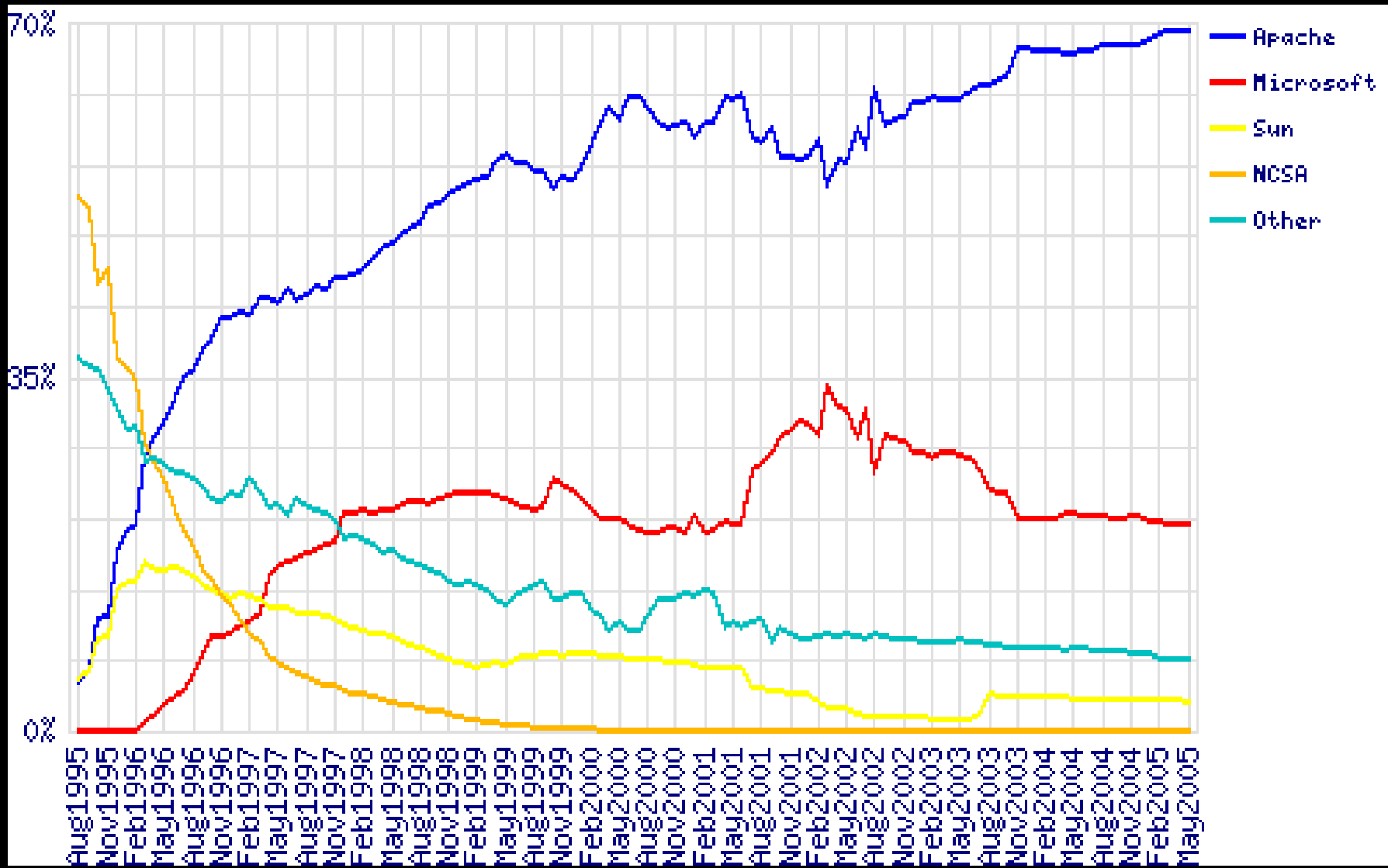
Software published by user-developers of major innovative websites (*Hotwired*, *Yahoo*, etc)

Publish full specifications – source code – of each improved version

Improvements, performance – and market share – skyrocket

Many new inventors avoid patenting (proprietary copyrighting), releasing source code as free software

Progress!



Source: Netcraft Web Server Survey, May 2005 - www.netcraft.com

lessons learnt?

openness

collaboration

free competition

“modern”
collaborative creativity

modular problems

problem \leftrightarrow solution

user ↔ developer

ability to use
(modify, share)

ability to find
(search, index)

ability to combine
(open standards)

ability to compete
(internet neutrality,
open standards,
limits on IPR)

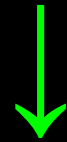
technology:
platform & specs

law:

IPR \leftrightarrow competition

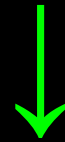
governance:
transparency

prescription!



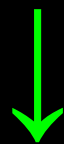
royalty free, reusable,
redistributable,
transparent specs

“open” infrastructure:
must be equally open to
all potential competitors



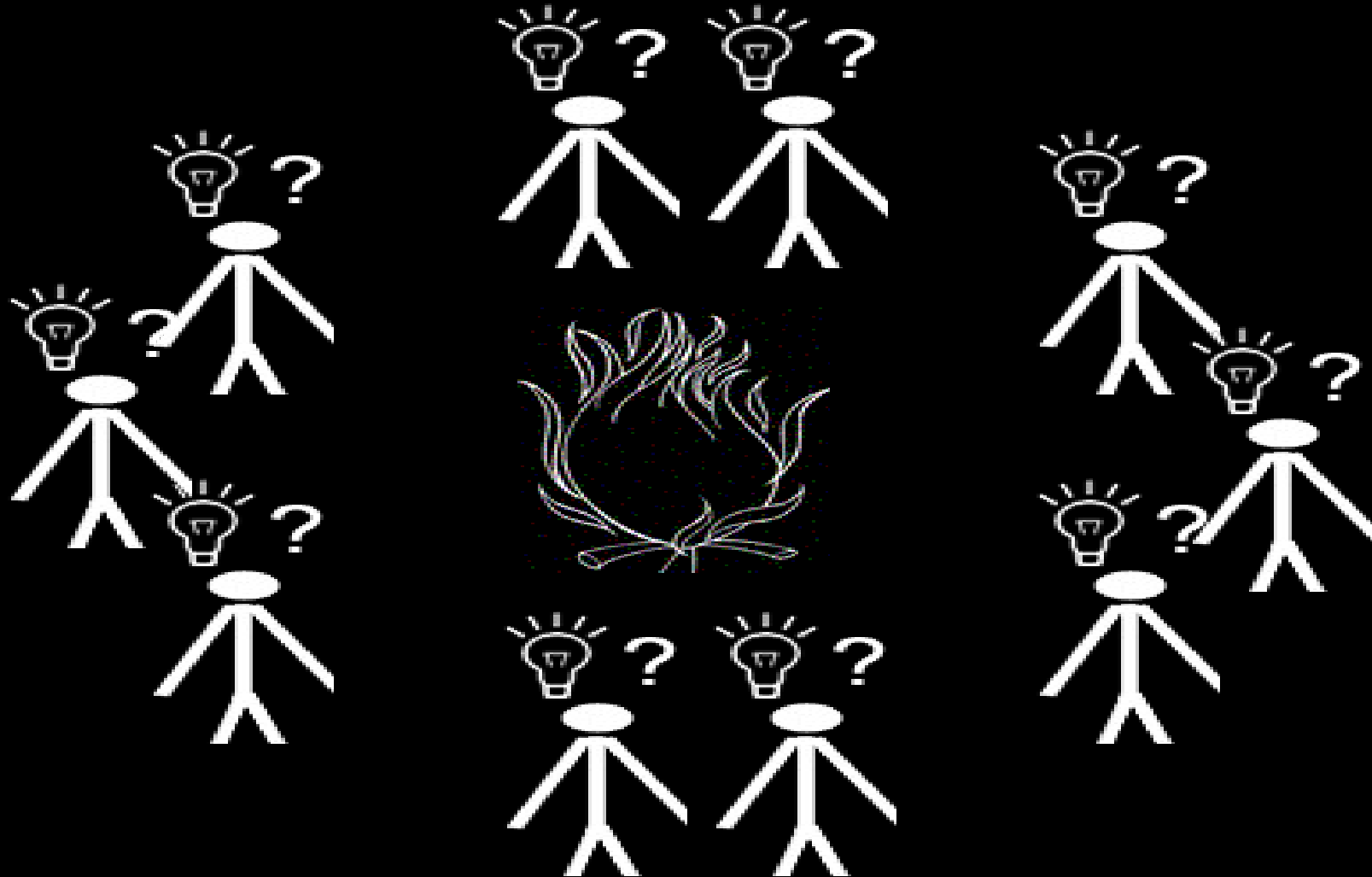
internet neutrality, equal
access to all service
providers (and services)

“open” building blocks:
essential knowledge needs
to be accessible to all

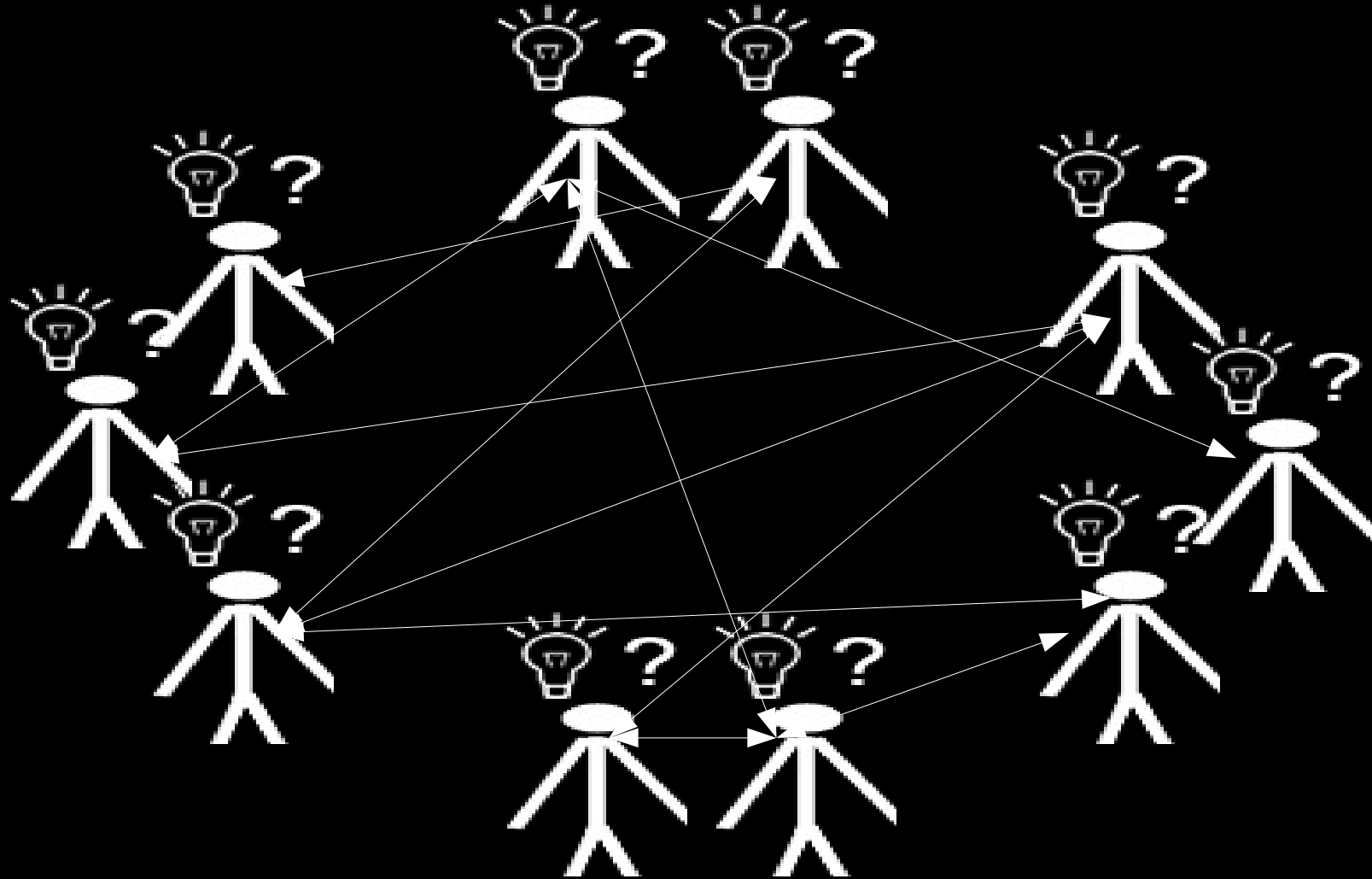


freely reusable data,
software, art
public funding → free
public access

old concept...



...on a new scale



Thank you

Rishab Aiyer Ghosh
ghosh@merit.unu.edu

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Collaborative Creativity Group
ccp.merit.unu.edu