

Rational to collaborate: open source, history and WIPO

The Reform of WIPO: Implementing the Development Agenda

Geneva, September 17, 2007

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Free/Libre/Open Source Software

Why should thousands of top-notch programmers contribute freely to the provision of a public good?

Lerner, Josh & Tirole, Jean. 2002. p198.

“Some simple economics of open source”.

Journal of Industrial Economics, Vol. 50 (June), pp 197-234.

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

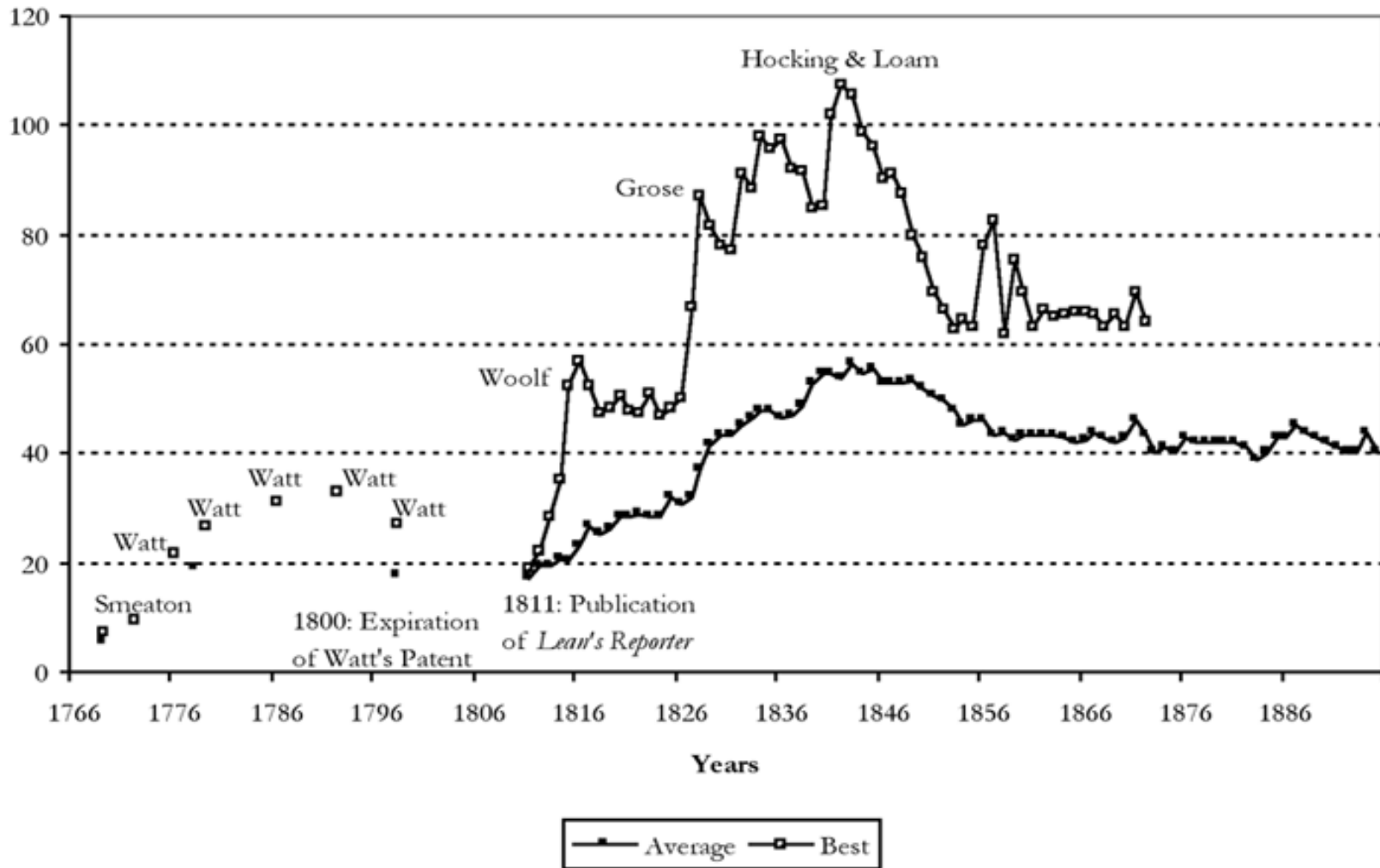
James Watt: history

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.

James Watt

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...

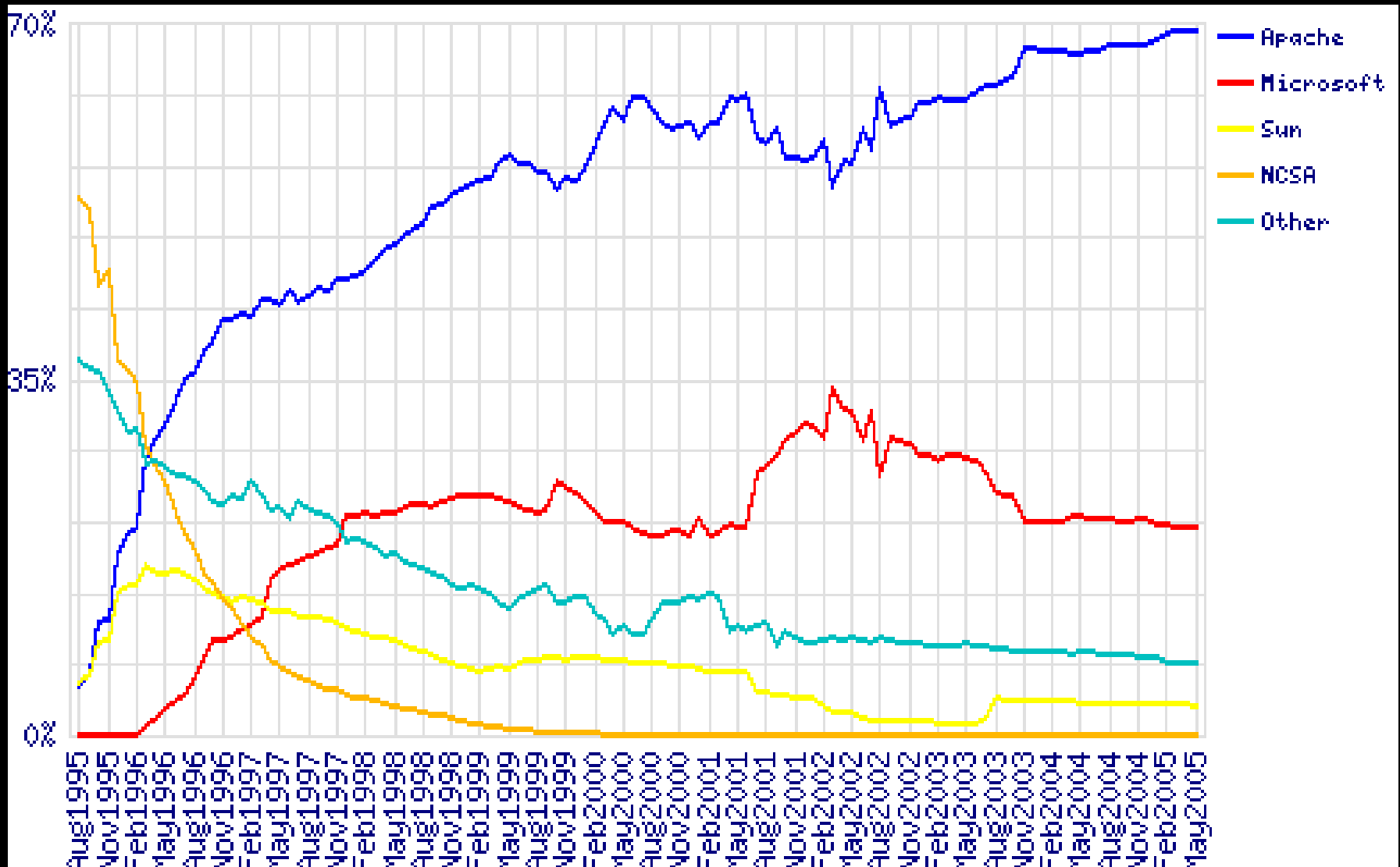
Software published by user-developers of major innovative websites (*Hotwired, Yahoo, etc*)

Publish full specifications – source code – of each improved version

Improvements, performance – and market share – skyrockets

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

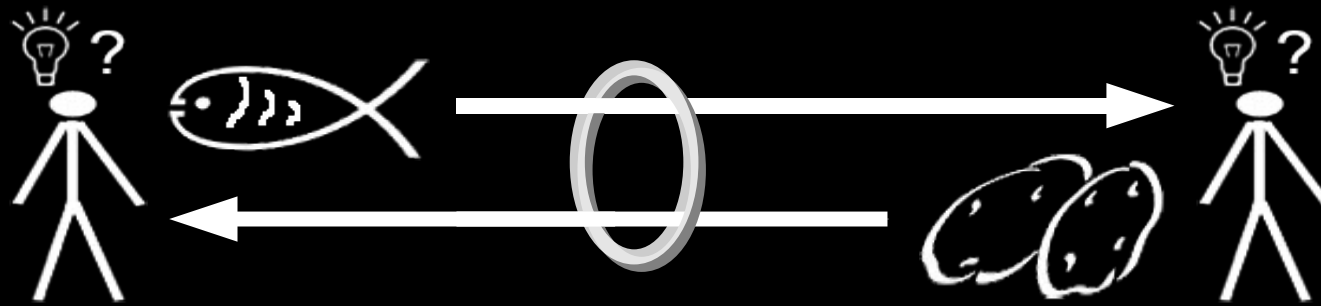
Web server market share



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

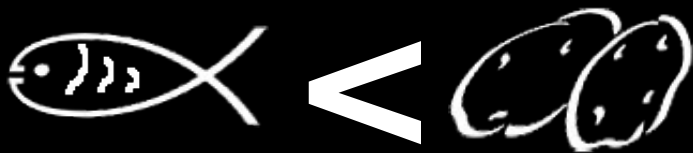
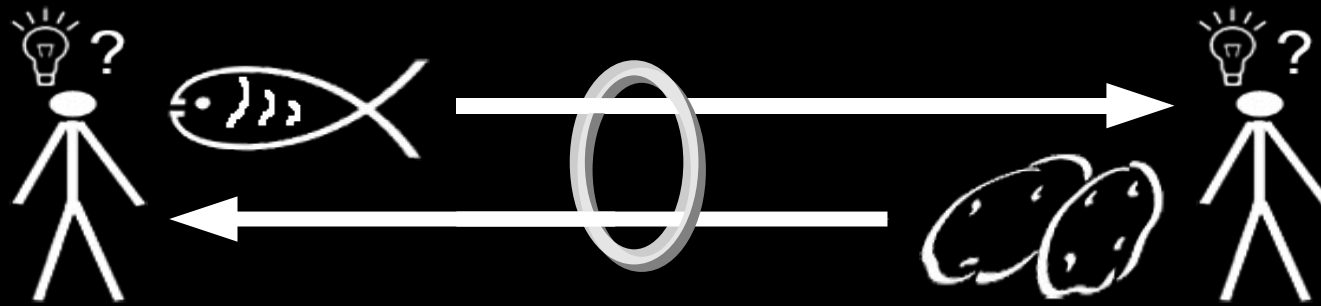
Value-flow and cooking pots

Barter

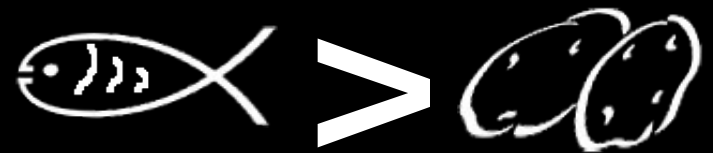


Value-flow and cooking pots

Barter

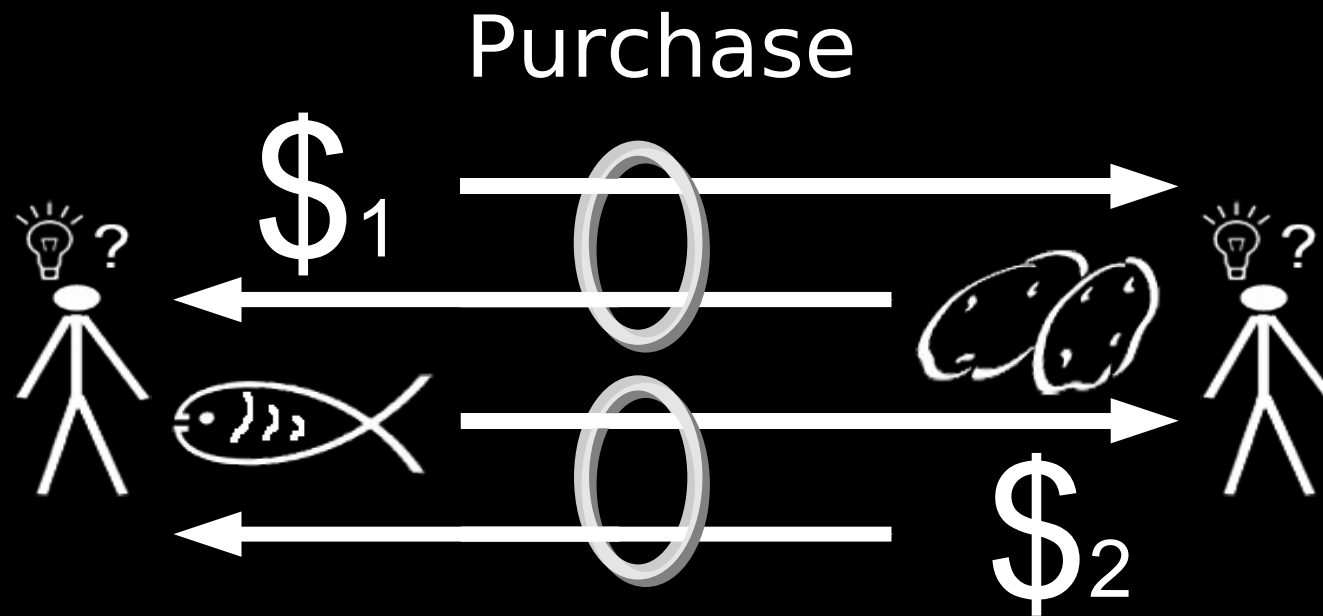


Profit



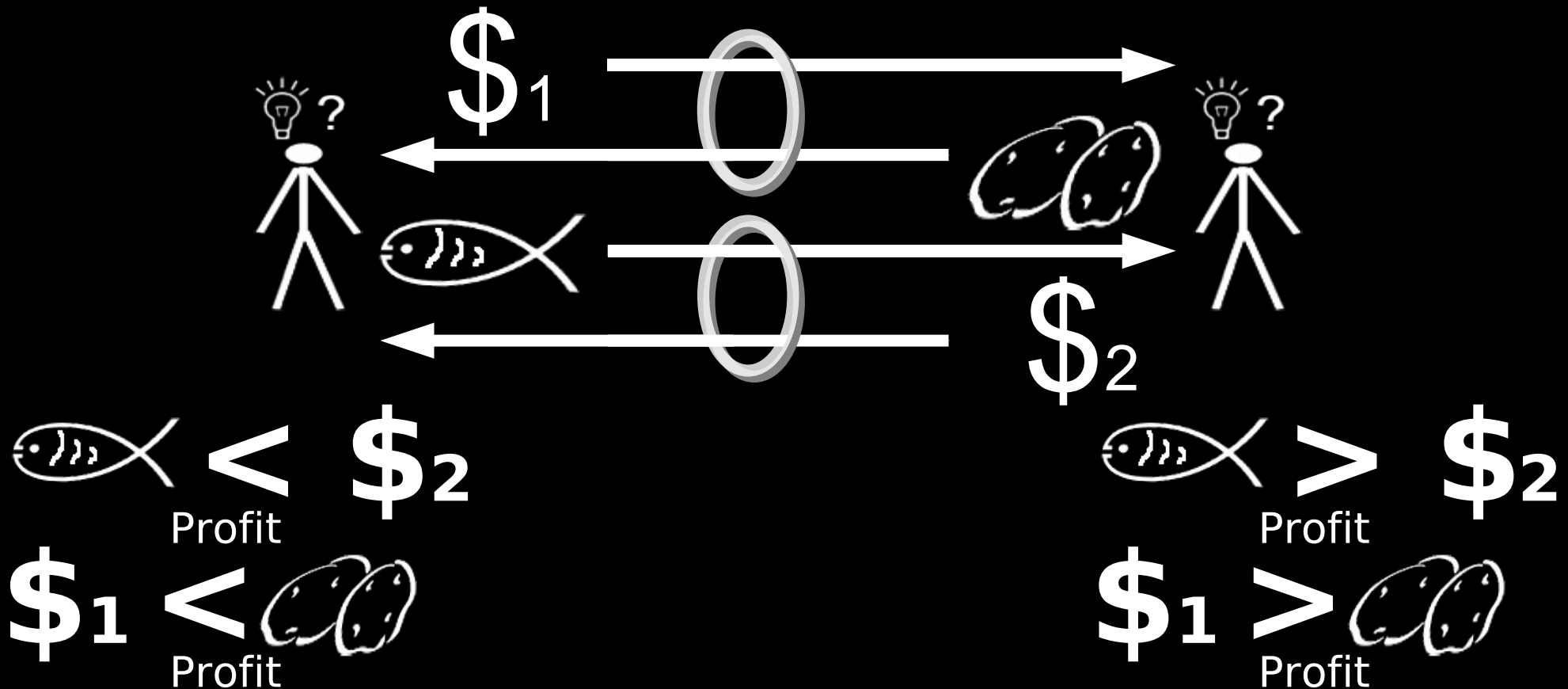
Profit

Value-flow and cooking pots



Value-flow and cooking pots

Purchase



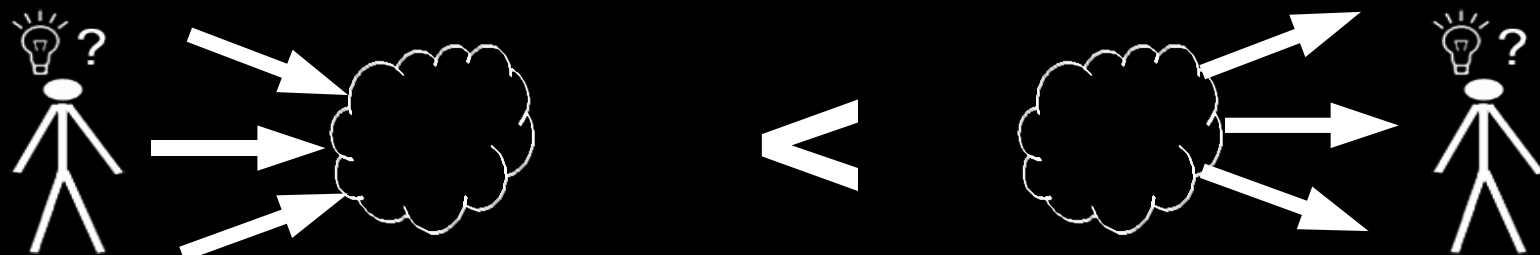
Value-flow and cooking pots

Cooking-pot (easier to draw a cloud)



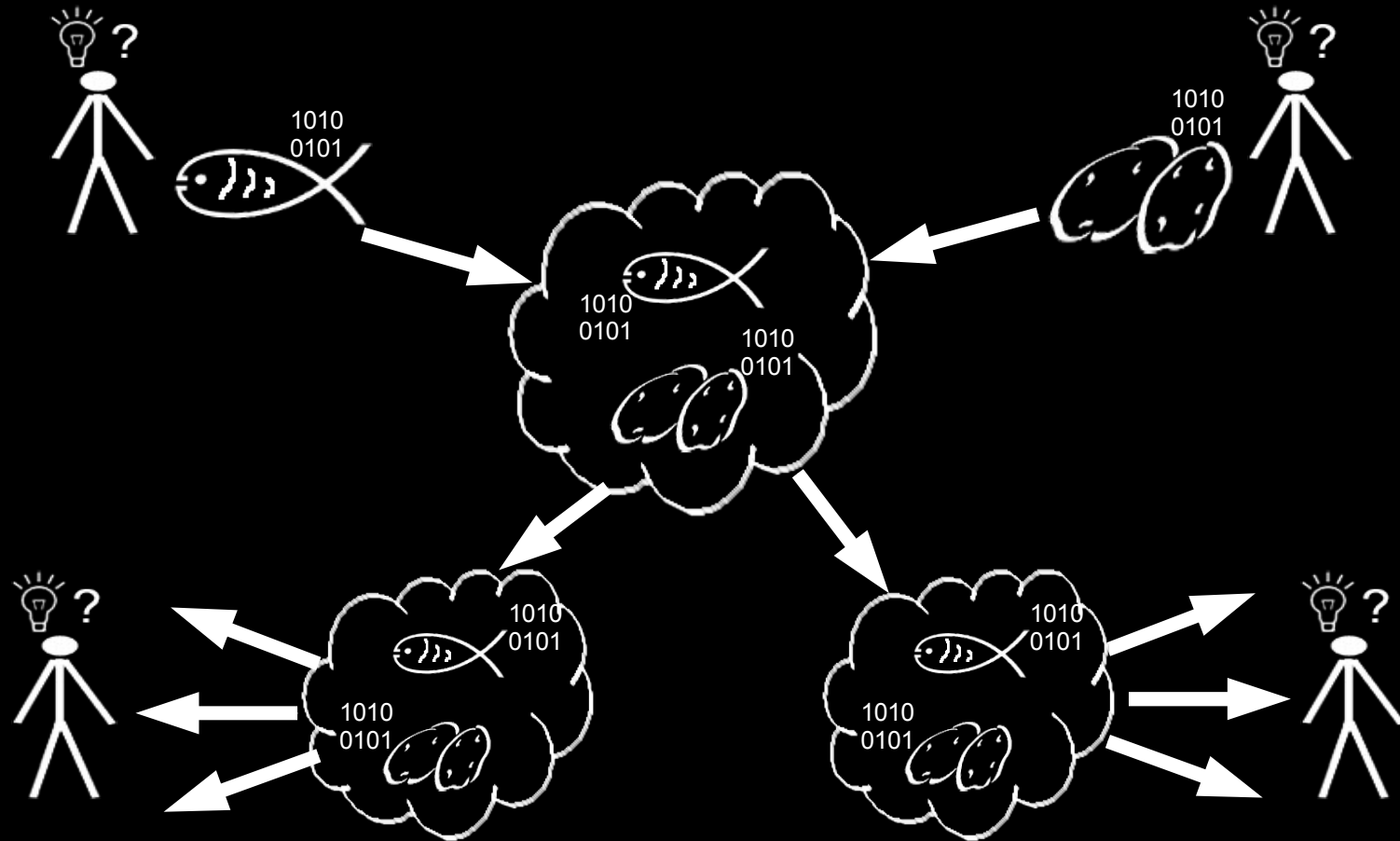
Value-flow and cooking pots

Cooking-pot (easier to draw a cloud)



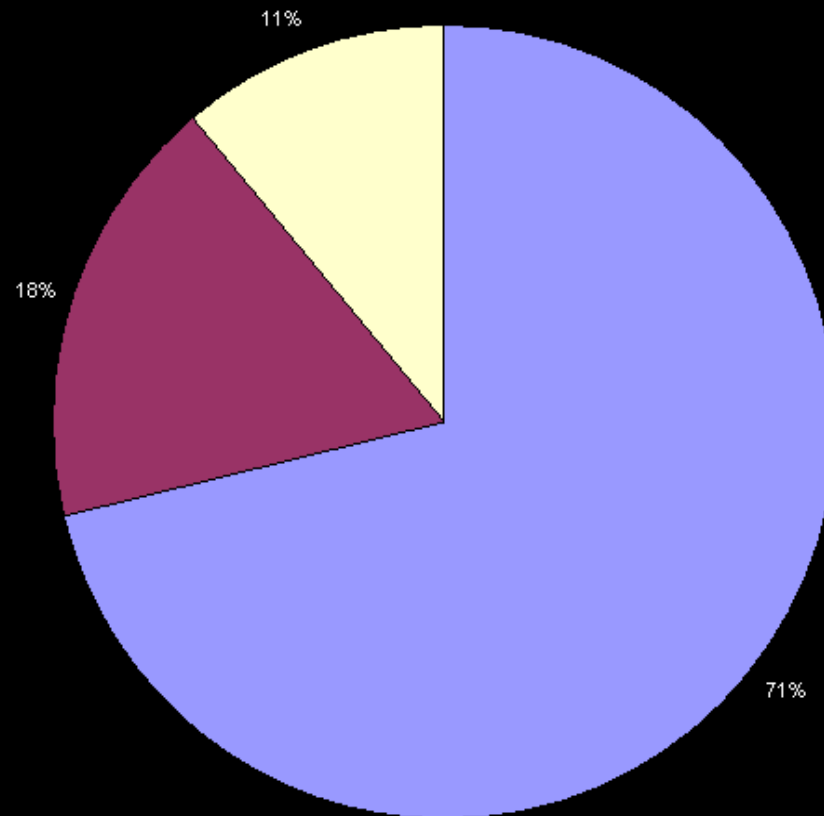
Profit

Value-flow and cooking pots



With knowledge goods, everyone gets *a copy of the whole pot*

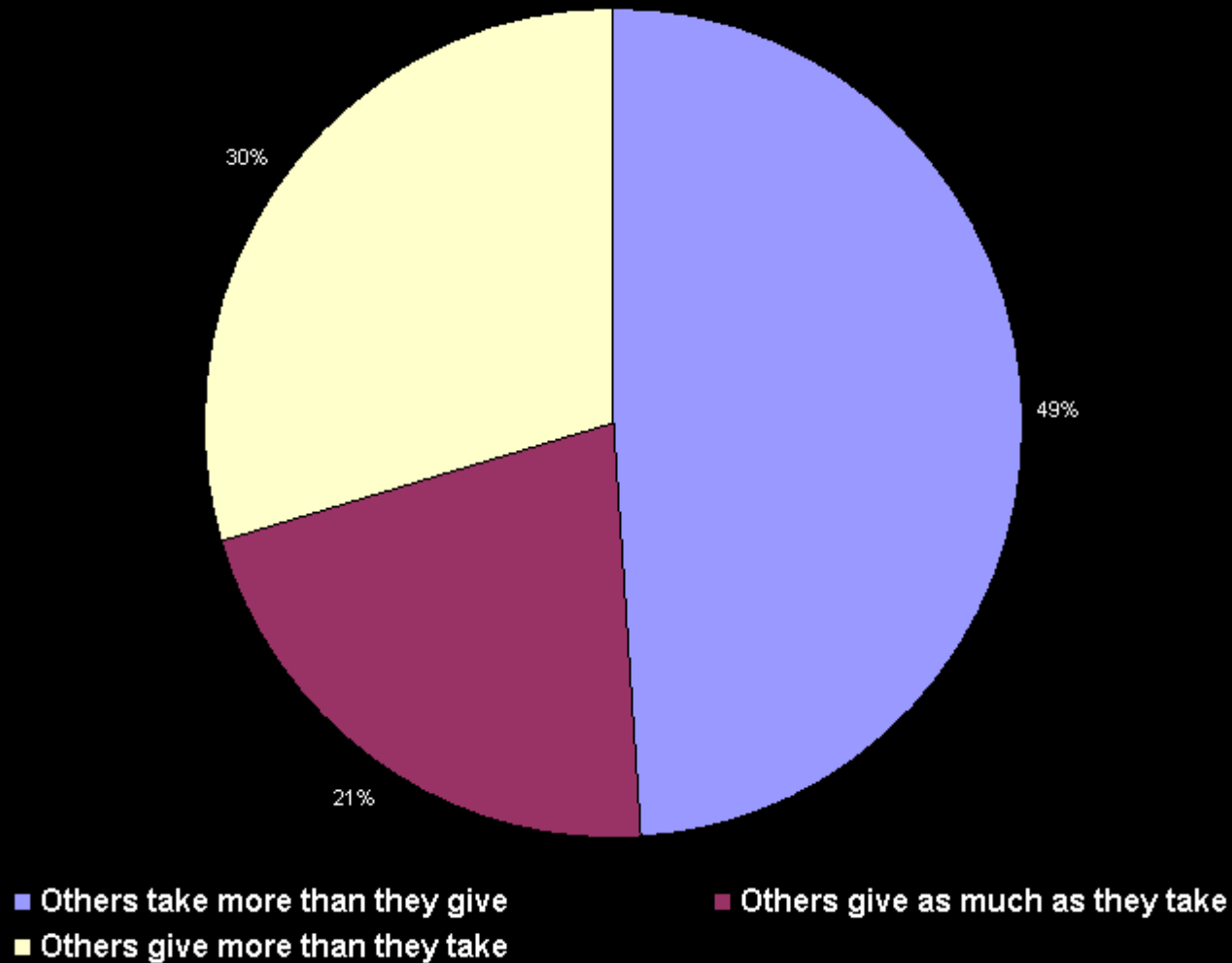
Altruism or self-interest?



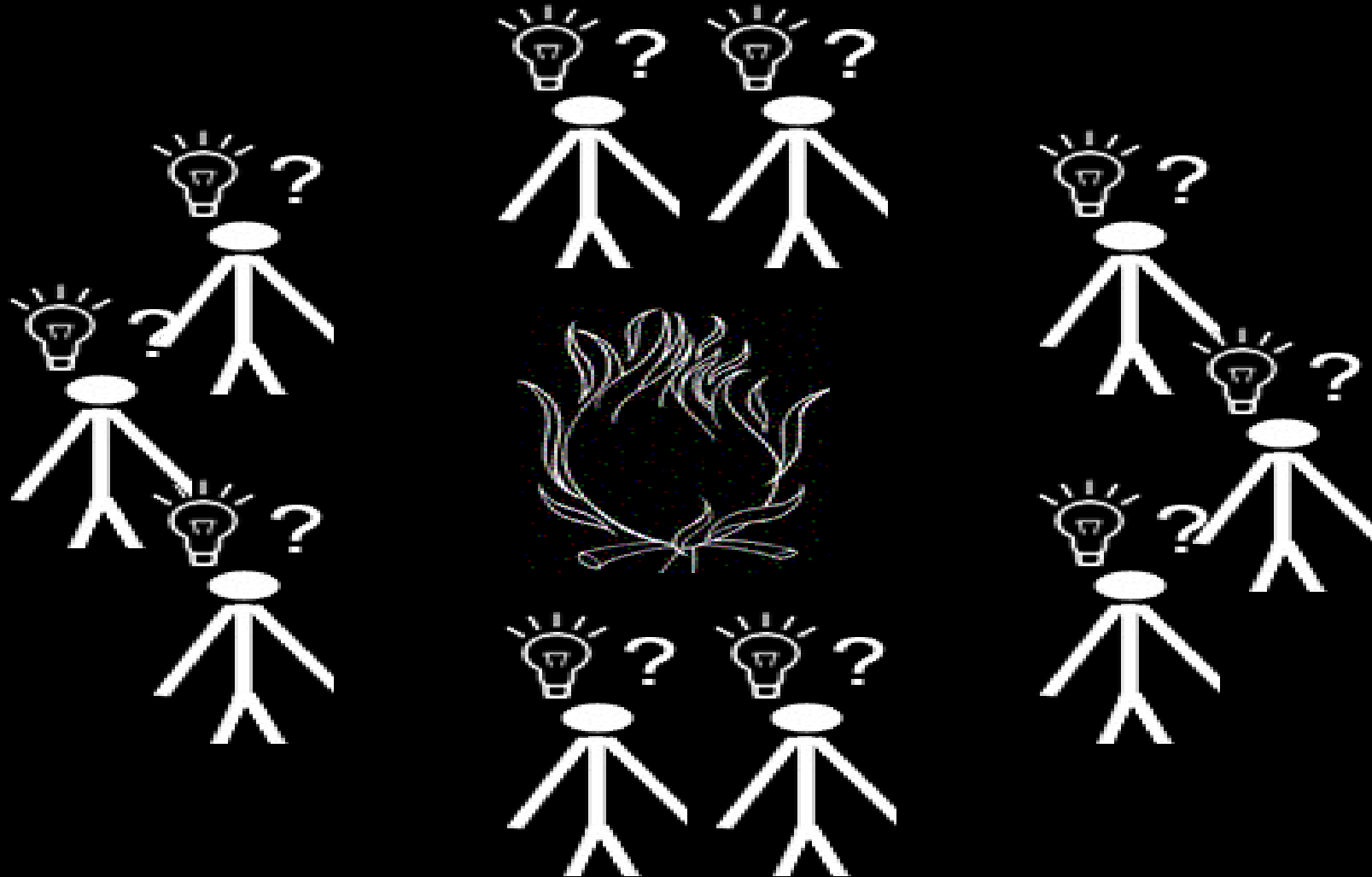
■ I take more than I give ■ I give as much as I take ■ I give more than I take

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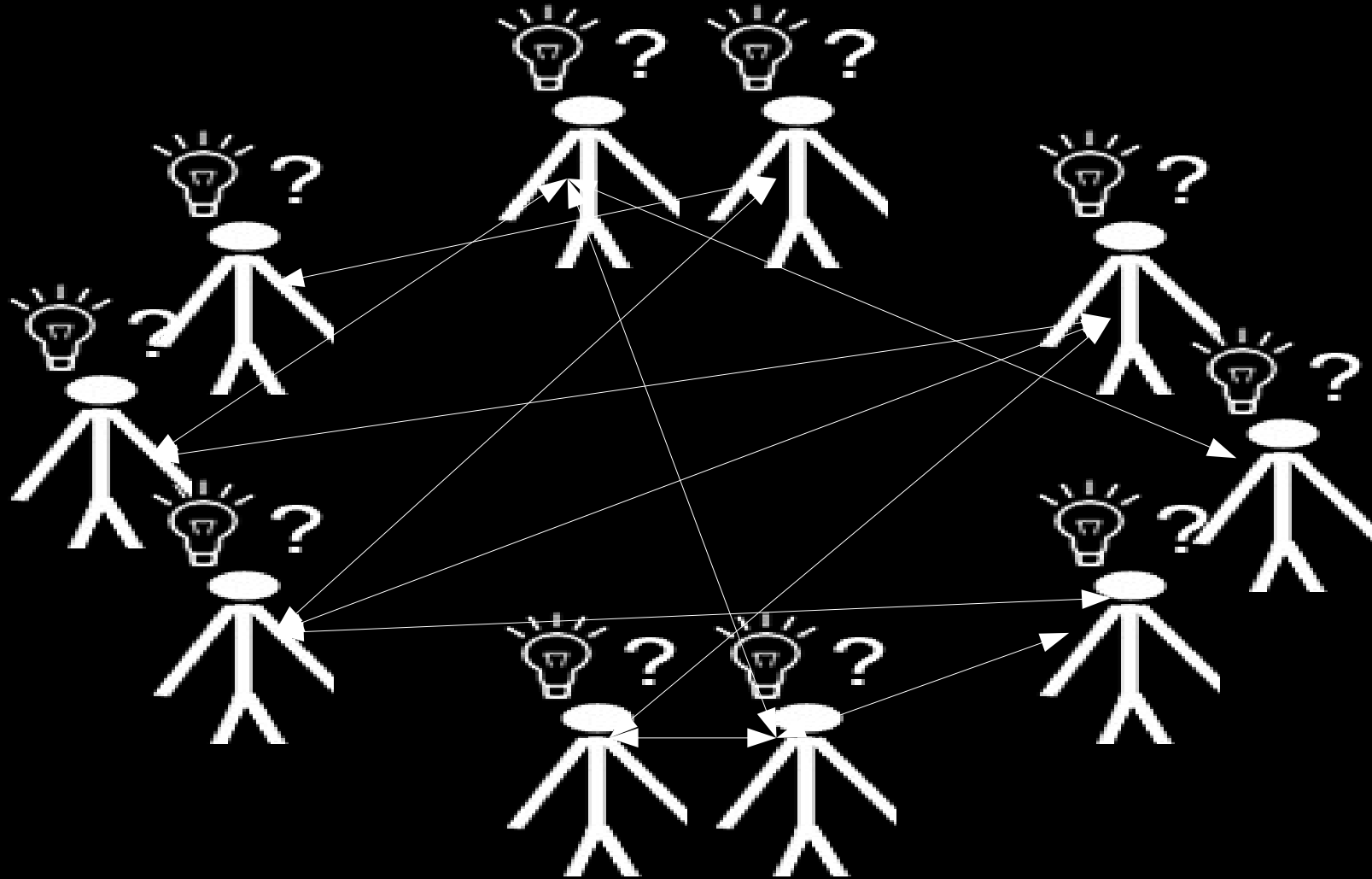
A Hobbesian view?



The concept is old...



This scale is new...



Collaboration among firms



SNP Consortium

WIPO and “alternative models”

2003: WIPO abandons plans to hold a meeting on “open collaborative development models” after objections from US PTO.

Lois Boland, director of international relations for the U.S. Patent and Trademark Office, said that open-source software runs counter to the mission of WIPO, which is to promote intellectual-property rights.

By Jonathan Krim, *Washington Post*, August 21, 2003; Page E01

WIPO and “alternative models”

Open Source depends on copyright.

Authors have the right to distribute their software (artwork, music, genome data...) under licenses that require no payment, but may specify conditions on further use.

WIPO and “alternative models”

New open collaborative development models are not well known, even when they are based on IPR.

WIPO can provide technical assistance to ensure countries are aware of these developments in innovation and IPR, and use these models as a tool.

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WIPO can provide technical assistance to ensure countries are aware of these developments in innovation and IPR, and use these models as a tool.

(some developed countries could learn this too!)

WIPO and “alternative models”

Open source communities are, above all, a platform for developing skills leading to employment

EU FLOSSPOLS / FLOSSWORLD projects:
flosspols.org/ flossworld.org

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Skills transfer thanks to IP licensing – a perfect case of IP-based technology transfer, even when payments are not directly involved

WIPO and “alternative models”

Development Agenda agreed proposal cluster D:

“To exchange experiences on open collaborative projects such as the Human Genome Project as well as on IP models.”

Thank you

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FLOSS Project

www.flossimpact.eu