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Emergent public goods and public private partnerships 2.0

Port Macquarie



5th Feb 2014

Nicholas Gruen

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T @ngruen1

AARES National Conference
Global, Local, Private, Public: Re-thinking the Categories, Bridging the Gaps



Lateral Economics

Outline

Caveats

Your theme

Emergent public goods

The ecology of public and private goods

Digital Public Private Partnerships

- The current state of the art
- Some new ideas

Government as impressario

Some thoughts on ag economics applications



Public goods

Public goods . . . present serious problems in human organisation.

Vincent and Elenor Ostrom - 1977



	Excludable	Non-Excludable
Rivalrous	Private Good	Common Pool Good
Non-Rivalrous	Toll or Club Good	Public Good



Lateral Economics

Web 2.0 platforms are public goods:

Google (1998)

Wikipedia (2001)

Blogs (early 2000s)

Facebook (2004)

Twitter (2006)





Esther Anatolitis

@_esther

Following



As a #MWF2012 public service I'd like to announce that the place called Beer Deluxe makes a fine \$12 soup.

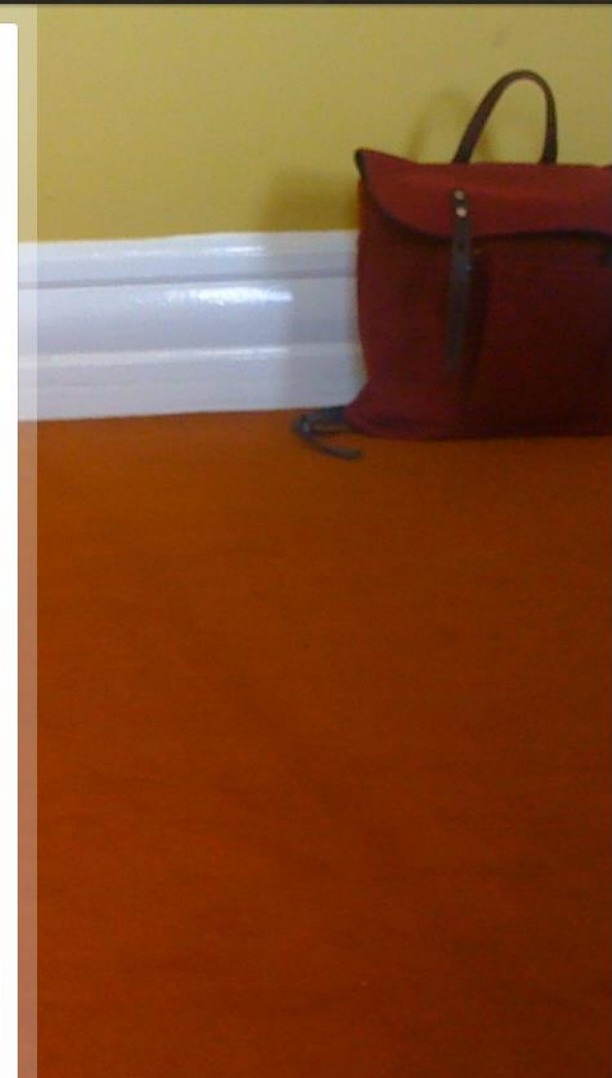
pic.twitter.com/wZool6Vc

Reply Retweet Favorite



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Flag this media



Lateral Economics

Jefferson's enlightenment dream

He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation.

Thomas Jefferson to Isaac McPherson, August, 1813



Web 2.0 platforms are public goods:

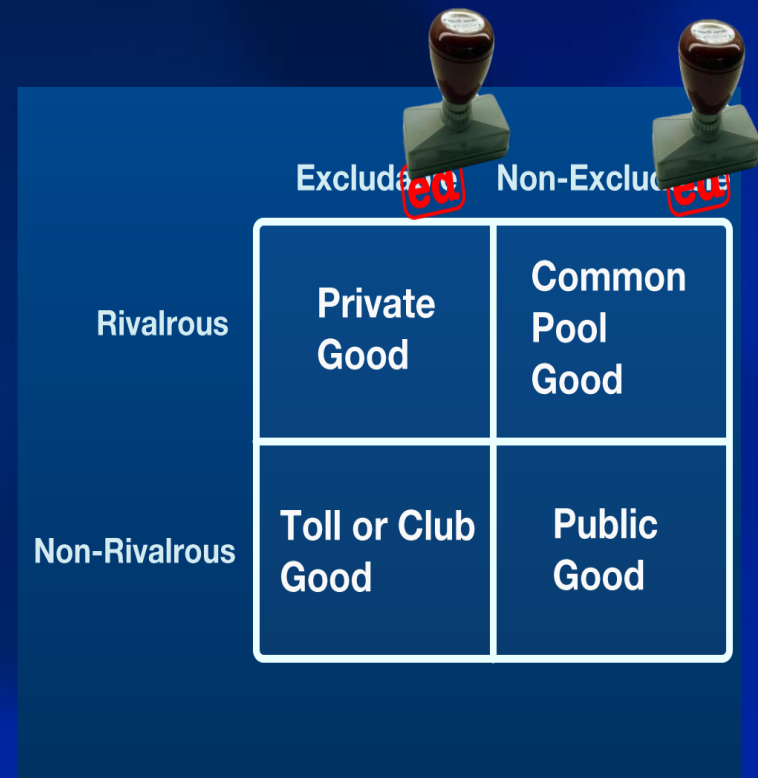
Google (1998)

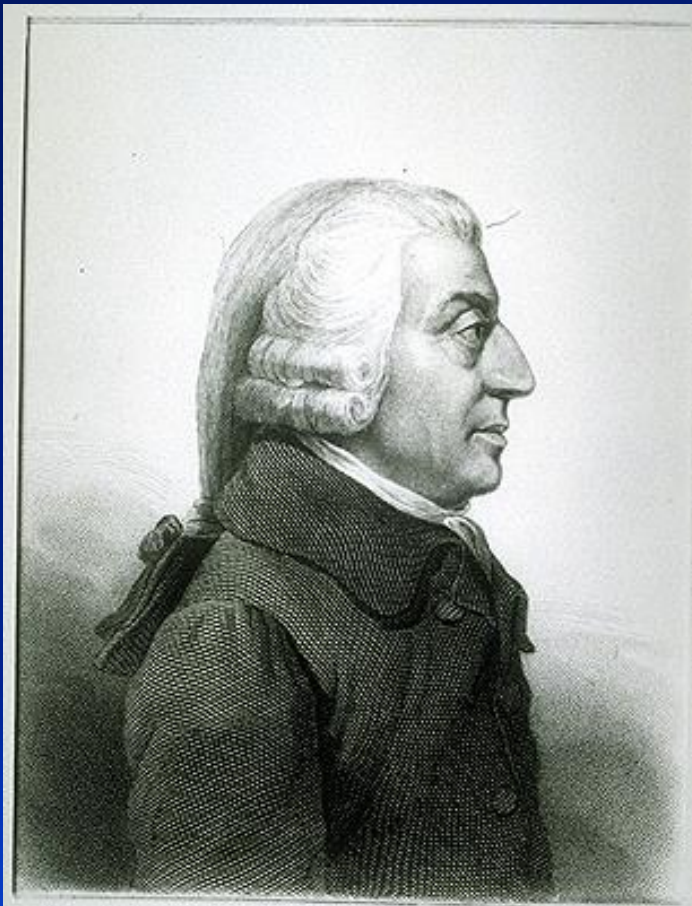
Wikipedia (2001)

Blogs (early 2000s)

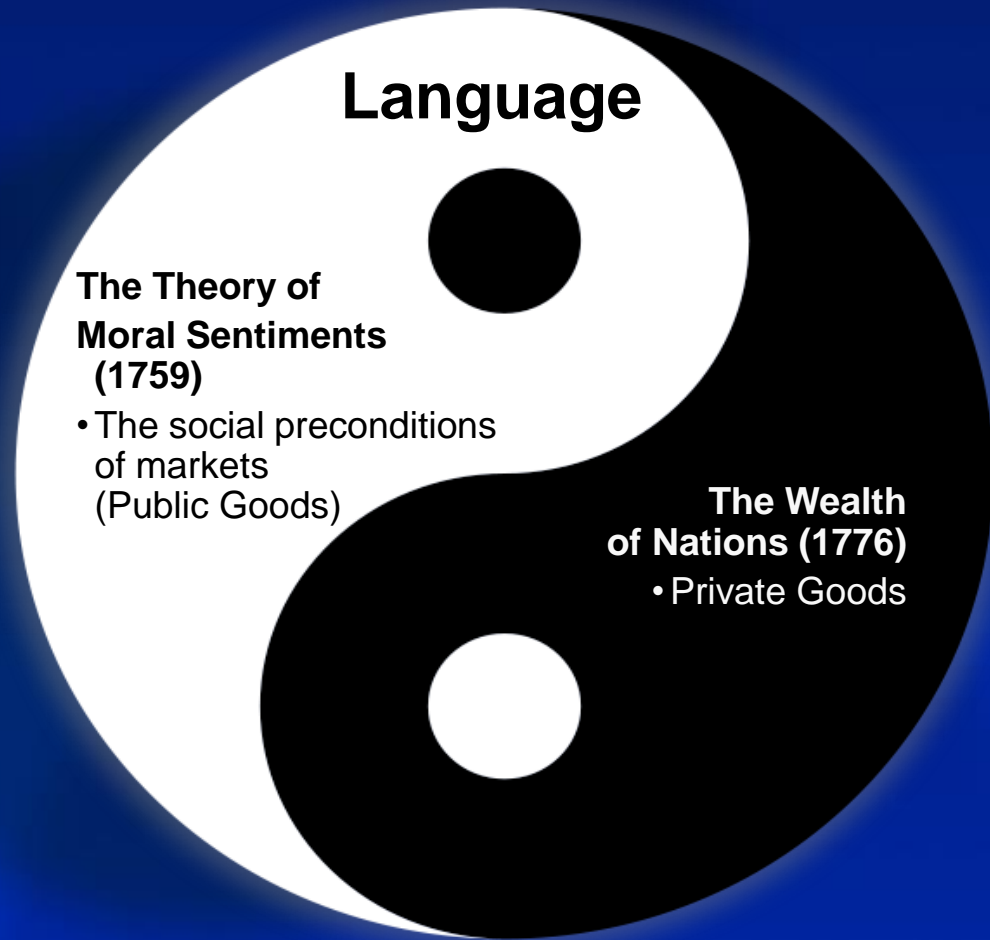
Facebook (2004)

Twitter (2006)

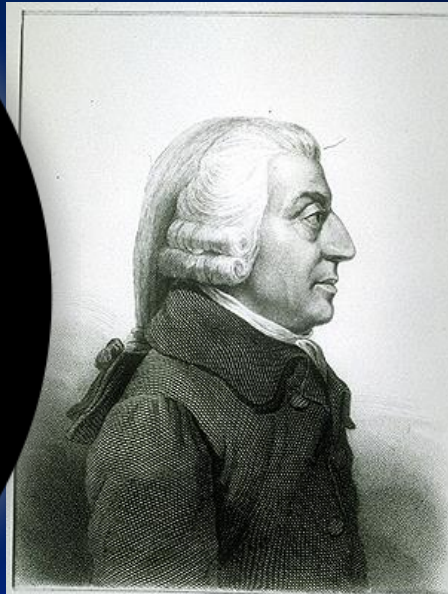
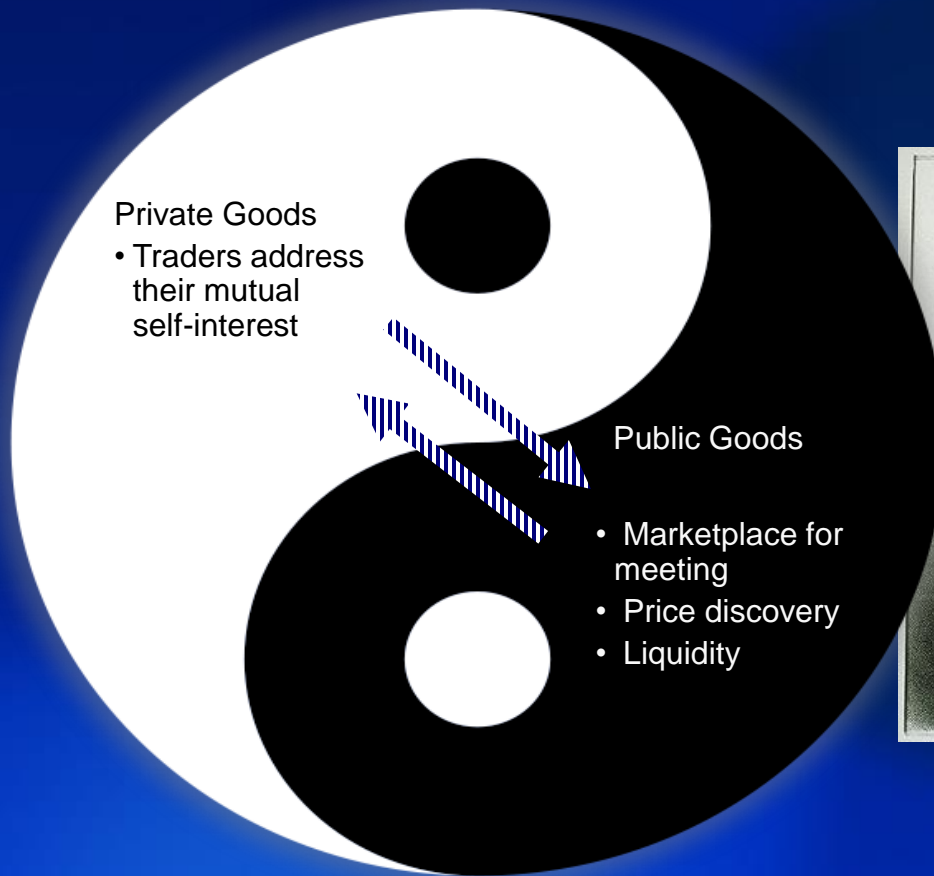




Adam Smith



The ecology of private and public goods: Markets



The ecology of public and private goods

Public Goods



Private Goods

[The public good of] Justice . . . is the main pillar that upholds the whole edifice. If it is removed, the great, the immense fabric of human society . . . must in a moment crumble into atoms.

Adam Smith

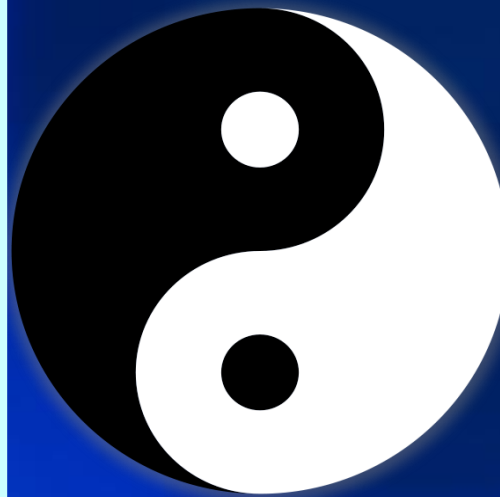


Lateral Economics

The ecology of public and private goods

Private goods

We look after ourselves



Public goods

- What won't look after itself
- Health
- Nurturing
- Education
- Alleviating
 - Suffering
 - Poverty
- Art
- Religion





We will ever strive for the ideals and sacred things of the city, both alone and with many; we will unceasingly seek to quicken the sense of public duty; we will revere and obey the city's laws; we will transmit this city not only not less, but greater, better and more beautiful than it was transmitted to us.



The fractal ecology of public and private goods

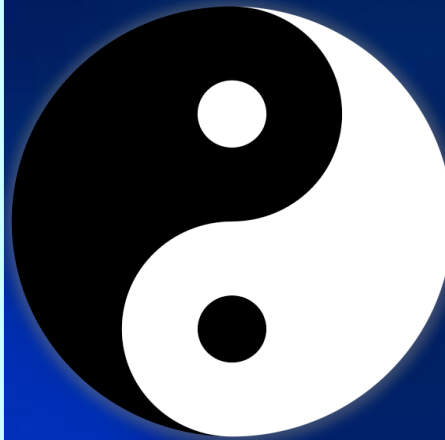
Private goods

Individuals

Firms

Teams

**Competition and
self-interest**



Public goods

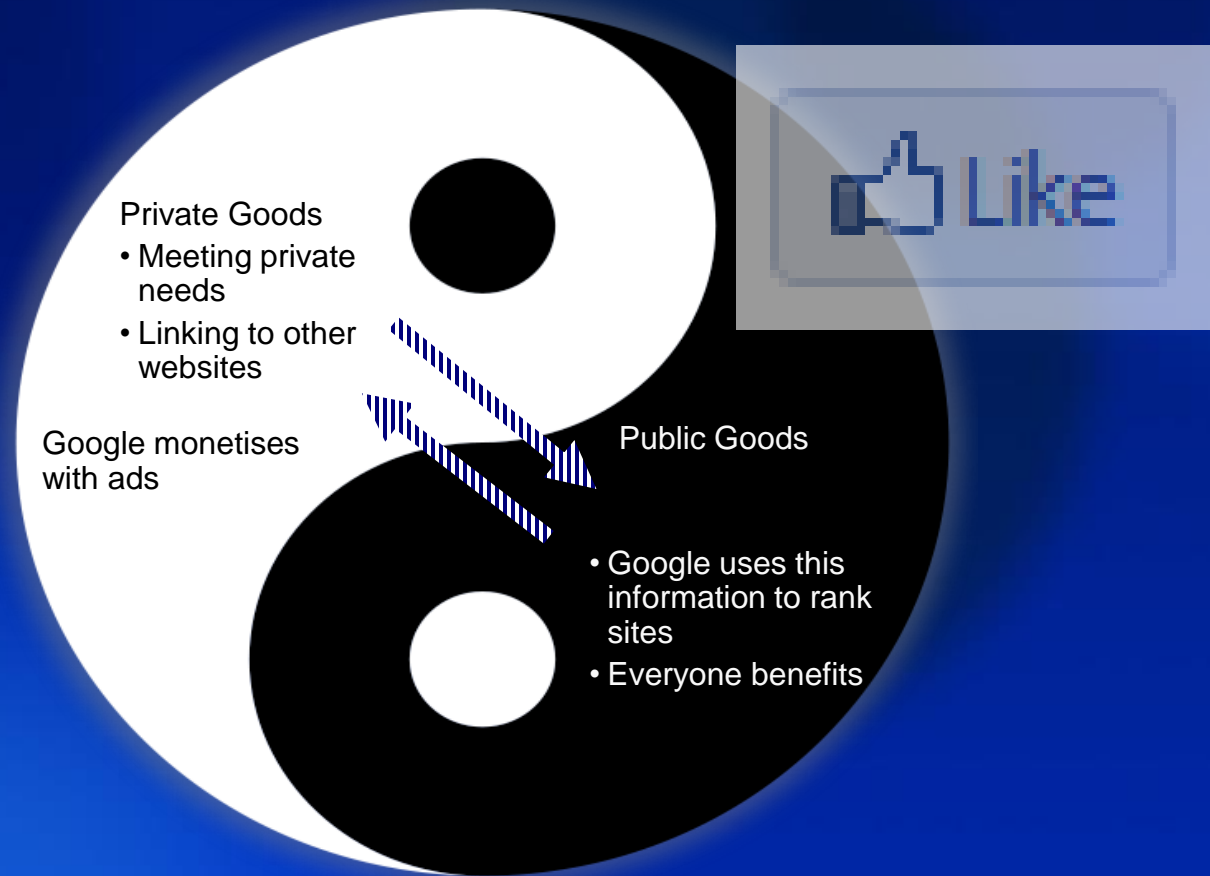
- Governments
- Families
- Civic association
- Philanthropy
- Within 'teams'

**Cooperation and
group-interest**



Lateral Economics

Private and public goods on a platform



The economics of abundance: a new birth of freedom

Public goods as an opportunity

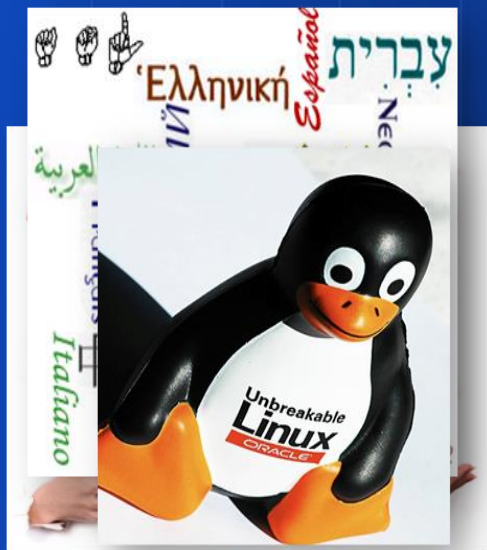
He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me.

Thomas Jefferson

Public goods as a problem

Public goods . . . present serious problems in human organisation.

Vincent and Elenor Ostrom - 1977



Emergent



Distributed on a platform



Coercively, centrally funded



Lateral Economics

Government as impresario

- Public access to state assets: 'Government platform'

- Release of public sector information

Intangible state assets as public

- Building platform as another

- Opening up to global state not-for-profit endeavour

With global like

KaGo

Volunt

- Integrating state capabilities into private platforms

- Redefining boundaries

- State funding of marginal cost pricing

- Data sharing PPPs

What could be built in this space?



← Emergent Distributed on a platform Coercively, centrally funded →

3. Corrections are saved and instantly shown to other users.

The screenshot shows a web interface for the National Library Newspaper Project. On the left, there are buttons for 'Print' and 'Cite: http://nla.gov.au/...', and a 'Tags (Keywords)' section. The main content area displays a list titled 'Top text-correctors' with the following entries:

1. John Warren (2361776)
2. annmanley (1785278)
3. Neill Hamilton (1394411)
4. John.F.Hall (1254531)
5. maurielyn (1174743)

On the right side of the interface, there is a sidebar with the following text:

National Library Newspaper Project

...without launch in
...correction has been

...of correctors are
...as

...of text corrected

...install from Bendigo
...ed > 500,000 lines!

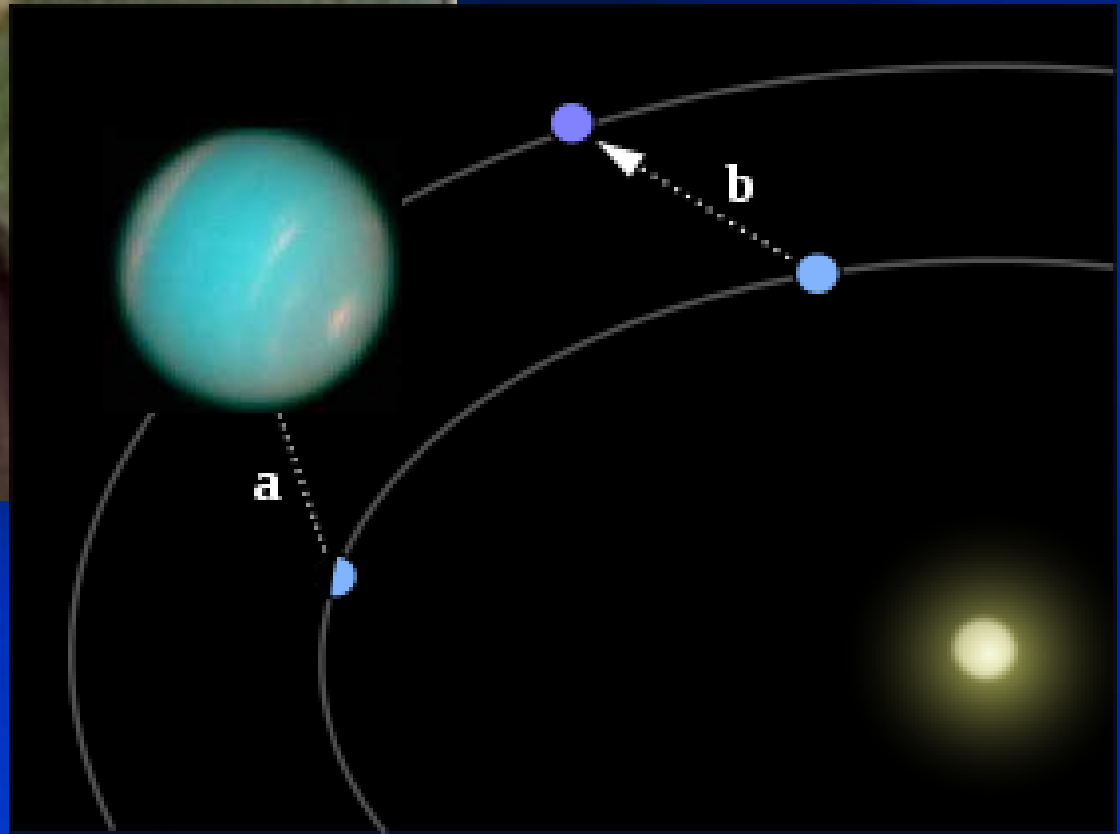
• Anne Manley from Narrawana
has corrected > 680,000



Public private partnerships



*Urbain Le
Verrier*



Strata Rx 2012: "Own Your Data", Anne Wojcicki

O'REILLY®

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3,356 videos ▾



Like



Add to

Share



396 views



Lateral Economics

ChromeFileEditViewHistoryBookmarksWindowHelp

Google CalendarInbox (52,883) - ngrdeturl.com - downloapeach data 07-8Wikipedia, the free enChessBomb / ChessdGenetic Testing for Hi

https://www.23andme.com

Other Bookmarks

23andMe

The leading health and ancestry DNA service

sign in

register kit

0

welcomeancestryhealthhow it worksstore

search

help

Learn valuable health & ancestry information.

welcome to you®

23andMe DNA Spit Kit

• Reports on 240+ health conditions and traits

• Testing for 40+ inherited conditions

• Discover your ancestry composition

• Updates on your DNA as science advances

\$99

Order Now

discoveries

Cilantro as a matter of taste

Parkinson's, Cholesterol, Type 2 Diabetes and BMI

Parkinson's Disease, Back Pain and Joint Replacement

reports

NEW

Biological Aging

In addition to the changes you can see and feel as you age, there are less obvious ways in which your body ages. For example, the cells in your body need to make copies of themselves to offset injury and general wear and tear. This renewal process, however, is limited by the length of your

video tutorials

explore our collection of education materials

“

#23andme identifies health risks based on your family's genetics, history & research. I am taking charge of my

”

Flip4Mac 3.2.0.16.dmg

iLvSetup-r0-n.exe

AHISA Speech.mp4

Whitehouse patent tro....pdf

Hotwire Canb 6-7th J....html

Show All

LateralEconomics

Efficient Replication of over 180 Genetic Associations with Self-Reported Medical Data

Joyce Y. Tung^{1*}, Chuong B. Do¹, David A. Hinds¹, Amy K. Kiefer¹, J. Michael Macpherson¹, Arnab B. Chowdry¹, Uta Francke^{1,2}, Brian T. Naughton¹, Joanna L. Mountain¹, Anne Wojcicki¹, Nicholas Eriksson¹

¹23andMe, Inc., Mountain View, California, United States of America, ²Department of Genetics, Stanford University, Stanford, California, United States of America

Abstract

While the cost and speed of generating genomic data have come down dramatically in recent years, the slow pace of collecting medical data for large cohorts continues to hamper genetic research. Here we evaluate a novel online framework for obtaining large amounts of medical information from a recontactable cohort by assessing our ability to replicate genetic associations using these data. Using web-based questionnaires, we gathered self-reported data on 50 medical phenotypes from a generally unselected cohort of over 20,000 genotyped individuals. Of a list of genetic associations curated by NHGRI, we successfully replicated about 75% of the associations that we expected to (based on the number of cases in our cohort and reported odds ratios, and excluding a set of associations with contradictory published evidence). Altogether we replicated over 180 previously reported associations, including many for type 2 diabetes, prostate cancer, cholesterol levels, and multiple sclerosis. We found significant variation across categories of conditions in the percentage of expected associations that we were able to replicate, which may reflect systematic inflation of the effects in some initial reports, or differences across diseases in the likelihood of misdiagnosis or misreport. We also demonstrated that we could improve replication success by taking advantage of our recontactable cohort, offering more in-depth questions to refine self-reported diagnoses. Our data suggest that online collection of self-reported data from a recontactable cohort may be a viable method for both broad and deep phenotyping in large populations.



02:37 / 12:51



BIOMEDICINE NEWS



Why the U.K. Wants a Genomic National Health Service

The U.K. plans to sequence 100,000 National Health Service patients by 2017—in a bold push to be a genomic medicine leader.

By Susan Young on October 25, 2013

By sequencing the genomes of 100,000 patients and integrating the resulting data into medical care, the U.K. could become the first country to introduce genome sequencing into its mainstream health system. The U.K. government hopes that the investment will improve patient outcomes while also building a genomic medicine industry. But the project will test the practical challenges of integrating and safeguarding genomic data within an expansive health service.

Officials breathed life into the ambitious sequencing project in June when they announced the formation of [Genomics England](#), a company set up to execute the £100 million project. The goal is to "transform how the NHS uses genomic medicine," says the company's chief scientist, Mark Caulfield.

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Those changes will take many shapes. First, by providing whole-genome sequencing and analysis for National Health Service patients with rare diseases, Genomics England could help families understand the origin of these conditions and help doctors better treat them. Second, the company will sequence the genomes of cancer patients and their tumors, which could help doctors identify the best drugs to treat the disease. Finally, say leaders of the 100,000 genomes project, the efforts could uncover the basis for bacterial and viral resistance to medicines.

SPONSORED CONTENT

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MIT Technology Review

WHY IT MATTERS

DNA sequencing is expected to improve medical care, but researchers and health care providers aren't yet sure how to best use genomic data.

PPPs 2.0

Private sector builds service

Public sector contributes its resources

- Networks
- Nudges
- Non-obstruction
- Financial internalisation

Subject to openness and privacy undertakings

Much more for each in partnership than alone

Australia acquires new research assets



Government as impresario



← Emergent Distributed on a platform

Coercively, centrally funded →



Lateral Economics

Government as impresario

Public Private Partnerships

- 23andMe

Directory

- HealthKit

Interfaces

- Open Aust
- SeeClickFix
- CareMonkey

Internal Innovation

- OneTouch
- FixMyBudget
- e-taskr

Chaperone

- Murmur

Validation

- Rate my prof
- Rate Govt Services

Seeding altruism

- Code for Australia

Building platforms

- Open Australia
- Sense-t



← Emergent Distributed on a platform

Coercively, centrally funded →



Lateral Economics

The art of the PPP

To come up with terms of engagement which

- Play to each sector's strengths
- Including cultural/economic norms/imperatives
- Within the hard-won traditions of modern liberal democratic government
- Data PPPs might reinvigorate the search for socially advantageous PPPs elsewhere
- It's the interface stupid!



Ag



Government as impresario



CRCs

RDCs

Industry
Levies

Extension
services

State supported
co-ops

Action Agendas strategies etc



← Emergent Distributed on a platform

Coercively, centrally funded →



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Ag?

murmur

You have answered all questions on The Culture. You can update or review your responses.

Earnest Kshlerin

Sign Out

6 of 6

The Development

My job performance is evaluated fairly



Agree

The right people are rewarded and recognised at ACME



Neither agree nor disagree

Poorer performance is managed well at ACME



Neither agree nor disagree

I receive the training I need to perform my current job effectively



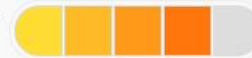
Strongly disagree

I am given good opportunities to improve my skills at ACME



Disagree

I believe there are good career opportunities for me at ACME



Agree

ACME is a great organisation for me to make a contribution to my [field/profession/cause/development]



Agree

I receive appropriate recognition for good work



Agree

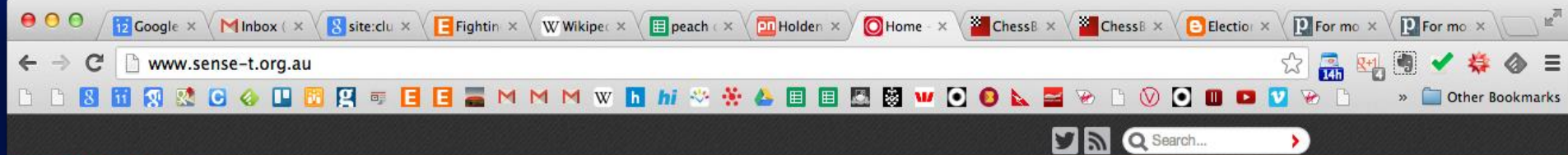
The Spy Who Loved -azw

22. Launch SV Bugcr....html
Cancelled

Show All



Lateral Economics



sense-t

from sensing to intelligence

Home
welcome

About
what we do

Projects
what we're up to

Latest News
what's new

People
who we are

Contact
get in touch

**"Tasmanian farmers now
can take agriculture to a
new level of innovation
and productivity."**

Jan Davis, CEO Tasmanian Farmers
and Graziers Association

Grant & Melanie Callum

Sense-T is creating the world's first economy-wide intelligent sensor network that integrates different data sources to build a digital view of Tasmania. Sense-T will give business, governments and communities the tools to make better decisions to help them with less...

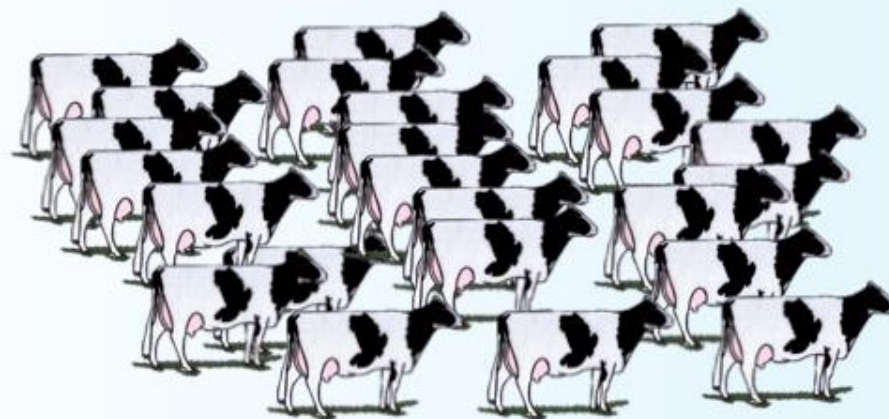


Lateral Economics





3323 bulls with
Australian daughters



9563 cows
deliberately selected

Australian national reference set

The DNA sample from any
bull or cow in this country is
now compared against a
large reference set



or



The ultimate delivery of DNA technology is such that the catalogue doesn't change – it just improves its accuracy. Very simple implementation!



Genotyping cows is as easy as
collecting tail hairs



General shot of cows

Dairy Futures CRC

Genomics is having its greatest impact in industries that already have infrastructure for genetic evaluation and is creating payoffs for public, industry and private investors.

Often no one party could achieve the outcomes.

Genomic analyses require lots of infrastructure of capital and skill and the public partnership can't justify doing this alone, and farmers' involvement improves confidence that outcome will be beneficial.



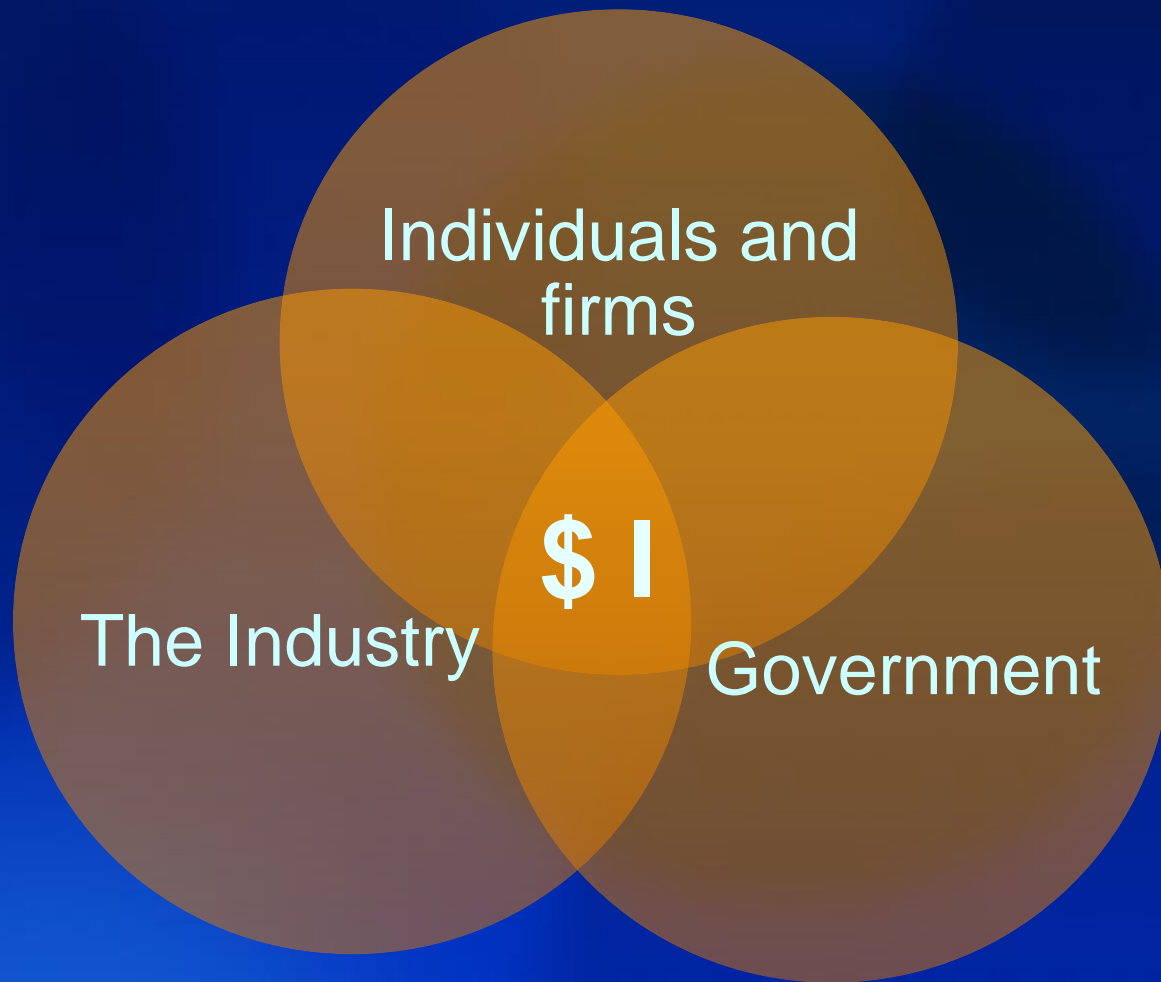
Dairy Futures CRC

Success depends

- public funding
- industry funding and;
- farmers providing access to herds, part-paying for genotyping, and providing access to years of records of on-farm performance from which the analyses can be run that deliver on the desired outcomes of economic development, biosecurity and biodiversity.

This often also requires third parties that have long associations in working with farmers to build this information network (breed societies, local herd improvement businesses).





It's the institutions, it's the
interface stupid



