

# Trends in Open Data

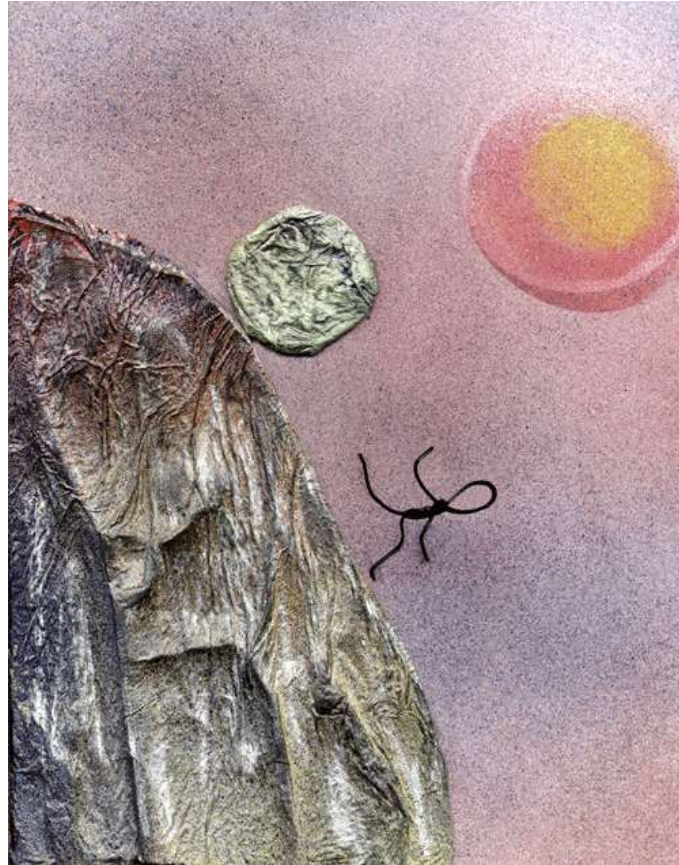
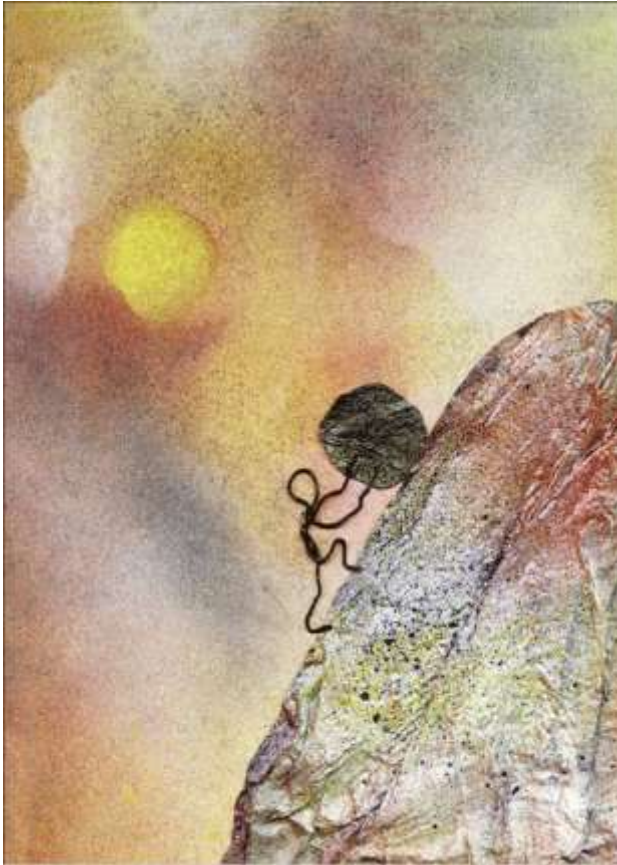
With a focus in science & biodiversity

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# The problem is an old one

HEYWOOD, V.H. (1974). Systematics-the stone of Sisyphus. Biol. J. Linn. Soc. 6(2): 169-178.



Paper & cost

Scientific  
competition

Extra work, no  
incentives

(Species  
protection)

# Information technologies lower barriers



- Digital storage and access dismiss the technical barrier
- It is time to change the culture
  - To gain in efficiency
  - To increase return of investment of public money
  - To enhance transparency and so quality

# Open Data and Government

Data paid with public money should be available to the society

Congress passed a law that recommended that if you take NIH (National Institutes of Health) funding for your research, you should deposit your research reports with the National Library of Medicine (NLM) so that the full text of your papers should be in the public domain. Voluntary compliance with this law has been only 3 percent, so things are about to change. We are now likely to see all of the publicly funded science literature forced online by the funding agencies. There is currently a bill

<http://newsbreaks.infotoday.com/NewsBreaks/US-Takes-Huge-Step-Forward-in-Opening-Access-to-Publicly-Funded-Research-87936.asp>



<http://opendata.euskadi.net>

## ¿Qué es Open Data Euskadi?

Es el portal de acceso a los datos públicos del Gobierno Vasco en formato reutilizable. Entre sus objetivos destacan:



### Generar valor y riqueza

Obteniendo productos derivados de los datos por parte de terceros.



### Generar transparencia

Reutilizando los datos para analizar y evaluar la gestión pública.



### Facilitar la interoperabilidad entre administraciones

Creando servicios que utilicen datos de diferentes



# I.e.: Tax tree (Finland)

[http://www.vm.fi/vm/en/04\\_publications\\_and\\_documents/03\\_documents/20130226Whatdo/veropuu\\_julkisyhteisot2011\\_english.pdf](http://www.vm.fi/vm/en/04_publications_and_documents/03_documents/20130226Whatdo/veropuu_julkisyhteisot2011_english.pdf)

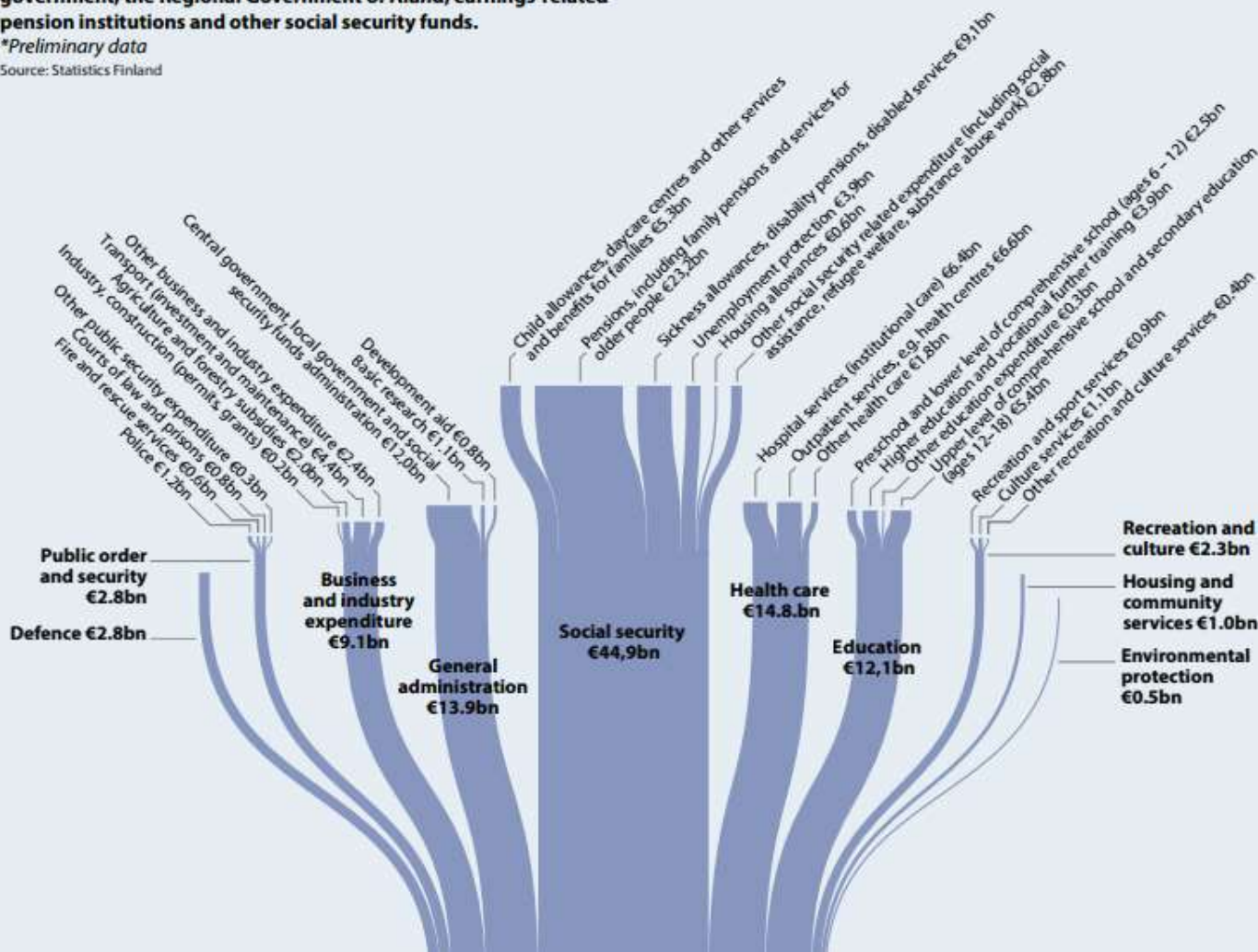
## What do I get for the tax I pay?

### GENERAL GOVERNMENT EXPENDITURE 2011\*

General government in Finland comprises central government, local government, the Regional Government of Åland, earnings-related pension institutions and other social security funds.

\*Preliminary data

Source: Statistics Finland



## Data-Intensive Scientific Discovery

- Data intensive. Basic science is data intensive in its own right, but data sources that support basic science are often insufficient to support applications. Localized impacts with global extent, such as intrusion of invasive species, are often difficult for centralized projects with small numbers of researchers to ascertain. **New applications-appropriate sources must be identified**, and new ways of observing (including the use of communities as data gatherers) must be developed.

Hey,T., Tansley,S., & Tolle,K. (Eds.) 2009. The fourth Paradigm. Data-Intensive Scientific Discovery. Microsoft Research. Redmon.  
E.E.U.U.

# Data publication is becoming a requisite in the scientific process

<http://www.nsf.gov/nsb/publications/2011/nsb1124.pdf>



## **Digital Research Data Sharing and Management**

December 2011

Task Force on Data Policies  
Committee on Strategy and Budget  
National Science Board

This report recognizes the evolving role of data in science and society and strong and sustainable data sharing and management policies as a critical national need.

# Data publication is becoming a requisite in the scientific process

[http://ec.europa.eu/research/science-society/document\\_library/pdf\\_06/recommendation-access-and-preservation-scientific-information\\_en.pdf](http://ec.europa.eu/research/science-society/document_library/pdf_06/recommendation-access-and-preservation-scientific-information_en.pdf)



EUROPEAN COMMISSION

Brussels, 17.7.2012  
C(2012) 4890 final

**COMMISSION RECOMMENDATION**

**of 17.7.2012**

**on access to and preservation of scientific information**

{SWD(2012) 221 final}  
{SWD(2012) 222 final}



# Data & environment



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## ENVIRONMENT

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### The Aarhus Convention



#### What is the Aarhus Convention?

The United Nations Economic Commission for Europe (UNECE) [Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters](#) ([pdf](#) ~50K) was adopted on 25 June 1998 in the Danish city of Aarhus (Århus) at the Fourth Ministerial Conference as part of the "Environment for Europe" process. It entered into force on 30 October 2001. (For recent up-dates and the follow-up process please have a look at the [UNECE Convention website](#)).

The Aarhus Convention establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Parties to the Convention are required to make the necessary provisions so that public authorities (at national, regional or local level) will contribute to these rights to become effective. The

<http://ec.europa.eu/environment/aarhus/>

## DIRECTIVE 2003/4/EC

L 41/26

EN

Official Journal of the European Union

14.2.2003

### DIRECTIVE 2003/4/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 28 January 2003

### on public access to environmental information and repealing Council Directive 90/313/EEC

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Community, and in particular Article 175(1) thereof,

Having regard to the proposal from the Commission <sup>(1)</sup>,

Having regard to the opinion of the European Economic and Social Committee <sup>(2)</sup>,

Having regard to the opinion of the Committee of the Regions <sup>(3)</sup>,

Acting in accordance with the procedure laid down in Article 251 of the Treaty <sup>(4)</sup> in the light of the joint text approved by the Conciliation Committee on 8 November 2002,

Whereas:

(1) Increased public access to environmental information and the dissemination of such information contribute to

(6) It is appropriate in the interest of increased transparency to replace Directive 90/313/EEC rather than to amend it, so as to provide interested parties with a single, clear and coherent legislative text.

(7) Disparities between the laws in force in the Member States concerning access to environmental information held by public authorities can create inequality within the Community as regards access to such information or as regards conditions of competition.

(8) It is necessary to ensure that any natural and legal person has a right of access to environmental information held by or for public authorities without his having to state an interest.

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