

A journey to the roots of openness

Frédéric Cantat, IGN France / EuroSDR – BM4NMCAs Workshop, February 9th 2024, Leuven (Belgium)

Exploring the roots of culture of openness

government
accountability
field
data science
open mind
culture source
transparency knowledge



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Question: according to you, what are the roots of the culture of 'openness'?

Yes! WE'RE
OPEN

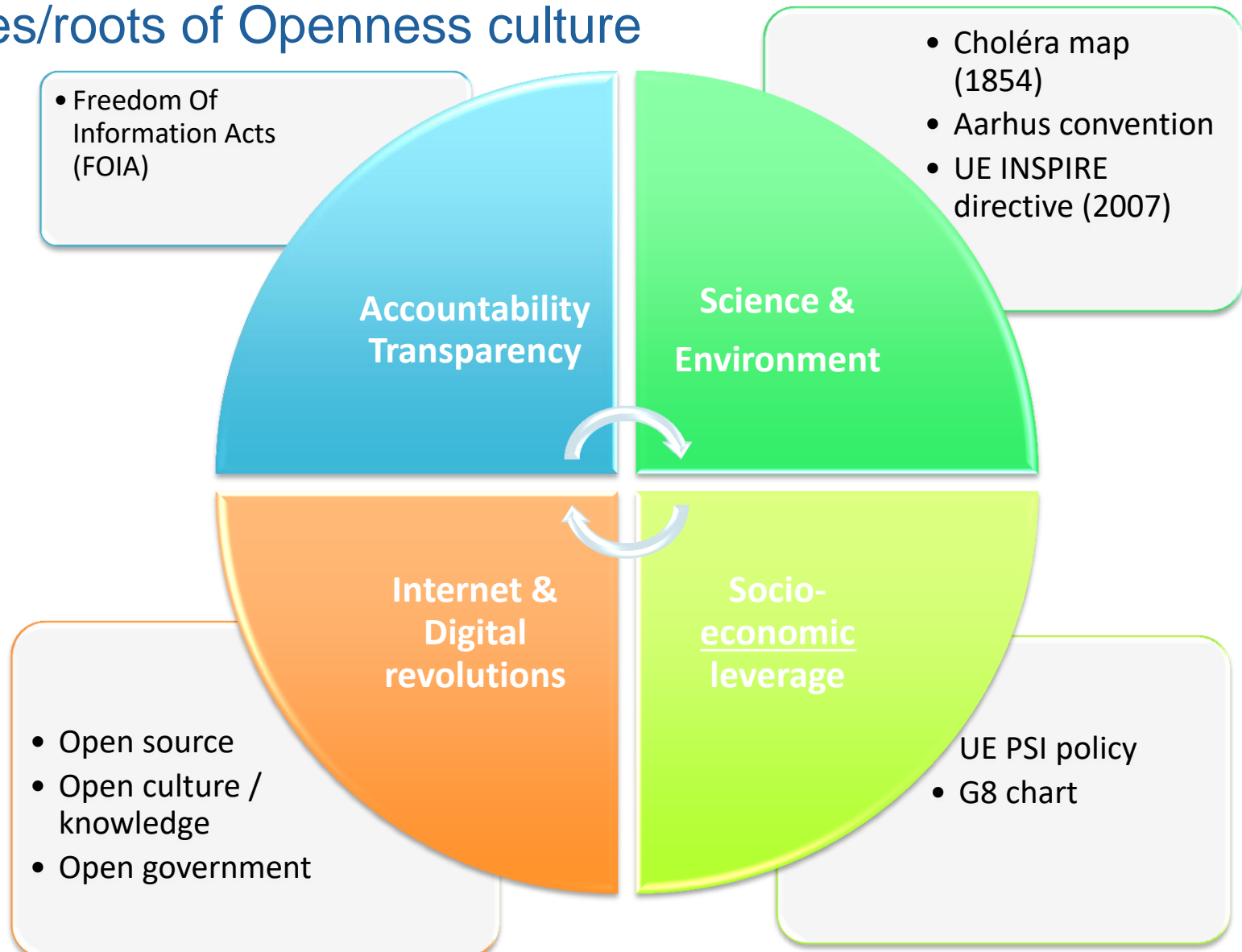
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Question: according to you, what are the roots of the culture of 'openness'?

1. Ideological motivations
2. Political motivations
3. Economical motivations
4. Social and environmental motivations
5. Cooperation motivations
6. Accountability and transparency (duty of)
7. Citizen participation motivations
8.

Sources/roots of Openness culture



Accountability and transparency



The First FOIA (promoted by Anders Chydenius) :

His Majesty's Gracious Ordinance Relating to Freedom of Writing and of the Press (1766) – Finland/Sweden

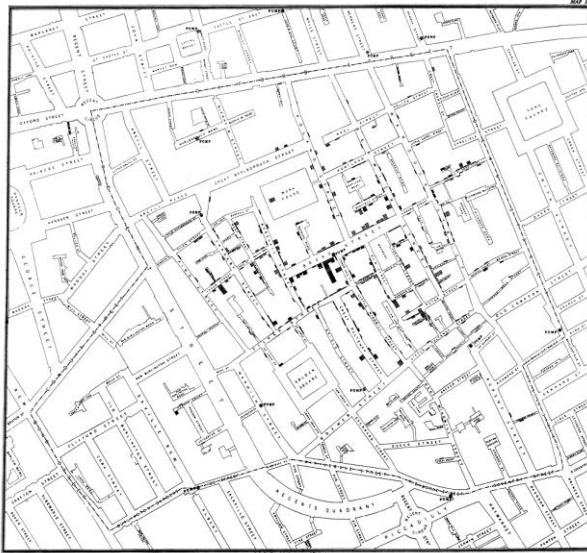


Article 15 of 1789
France's Declaration of Human and Civil Rights
 and, later, 1978 French FOIA



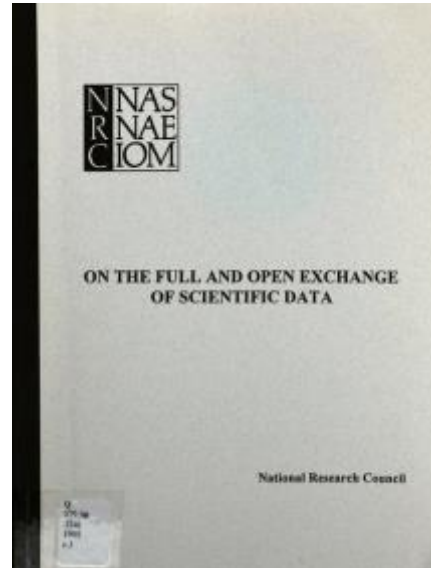
The Freedom of Information Act (FOIA) (1967)

Science & Environment 1/2



Cholera map (1854):

Thanks to a dot map of cholera cases, John Snow traced the source of the disease outbreak, the public water pump on Broad (Broadwick) Street in Soho



On the full and Open exchange of scientific Data (1995):

First occurrence in this publication of the American National Academy of Sciences (Committee on Geophysical and Environmental Data) of “open data” principle (referring to 1994 OECD works)



UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998):

First significant implementation of principle 10 of declaration of Rio (1992)

Science & Environment 2/2



Directive 2007/2/EC of the European Parliament and of the council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (**INSPIRE**) :

- Creation of a European Union spatial data infrastructure (SDI) for the purposes of EU environmental policies and policies or activities which may have an impact on the environment
- This SDI based on the infrastructures for spatial information established and operated by the Member States. The Directive addresses 34 spatial data themes needed for environmental applications.

INSPIRE Annex I, II, III spatial data themes

<p>Annex I</p> <ol style="list-style-type: none"> 1. Coordinate reference systems 2. Geographical grid systems 3. Geographical names 4. Administrative units 5. Addresses 6. Cadastral parcels 7. Transport networks 8. Hydrography 9. Protected sites
<p>Annex II</p> <ol style="list-style-type: none"> 1. Elevation 2. Land cover 3. Ortho-imagery 4. Geology

<p>Annex III</p> <ol style="list-style-type: none"> 1. Statistical units 2. Buildings 3. Soil 4. Land use 5. Human health and safety 6. Utility and governmental services 7. Environmental monitoring facilities 8. Production and industrial facilities 9. Agricultural and aquaculture facilities 10. Population distribution - demography 	<ol style="list-style-type: none"> 11. Area management/ restriction/regulation zones & reporting units 12. Natural risk zones 13. Atmospheric conditions 14. Meteorological geographical features 15. Oceanographic geographical features 16. Sea regions 17. Bio-geographical regions 18. Habitats and biotopes 19. Species distribution 20. Energy Resources 21. Mineral resources
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Internet & Digital revolutions (the three pillars/trends/X factors)



- Open source
(started in 1983)
- Open Culture /
Knowledge
(started in 1998)
- Open Government
(started in 2006)

Internet & Digital revolutions / came up on a fertile ground

The Tragedy of the Commons



Use of the commons is below the carrying capacity of the land. All users benefit.

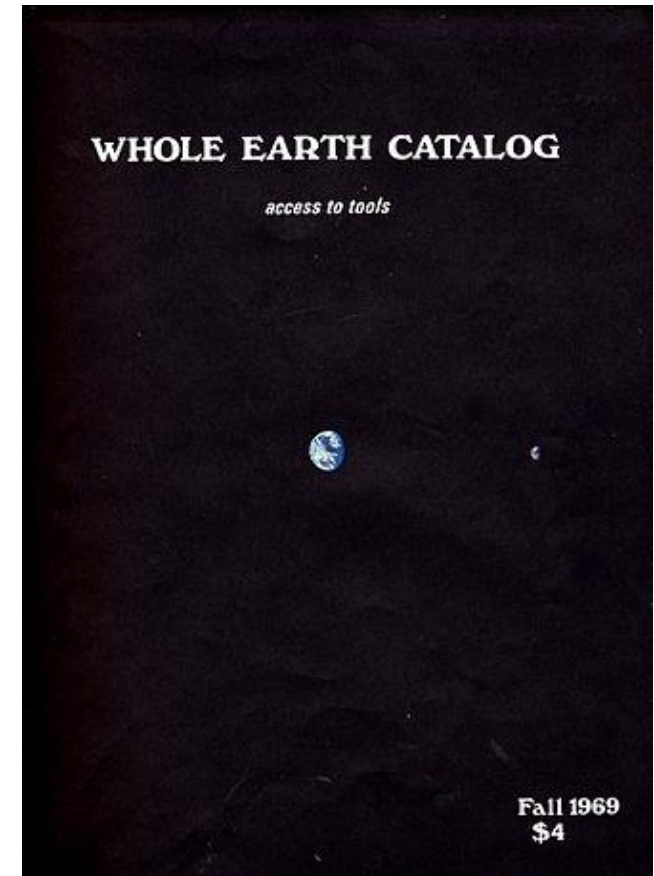
If one or more users increase the use of the commons beyond its carrying capacity, the commons becomes degraded. The cost of the degradation is incurred by all users.

Unless environmental costs are accounted for and addressed in land use practices, eventually the land will be unable to support the activity.

 **Ostrom's Eight Design Principles**

1. Define clear group boundaries	5. Use graduated sanctions for rule violators
2. Match rules governing use of common goods to local needs and conditions	6. Provide accessible, low-cost means for dispute resolution
3. Ensure that those affected by the rules can participate in modifying the rules	7. Make sure the rule-making rights of community members are respected by outside authorities
4. Develop a system, carried out by community members, for monitoring members' behavior	8. Build responsibility for governing the common resource in nested tiers from the lowest level up to the entire interconnected system

Commons governance and fights against enclosure and appropriation: from Garret Hardin article (Science-1968) to Elinor Ostrom works (2009 Economic Sciences Nobel Prize)



American counter culture of 60' and 70's, for instance: Steward Brand and its campaign "to have NASA release the then-rumored satellite image of the entire Earth as seen from space"

Internet & Digital revolutions / the “Open source” factor



Richard Matthew Stallman (aka rms) is an american free software activist and a programmer who founded...



FSF FREE SOFTWARE FOUNDATION

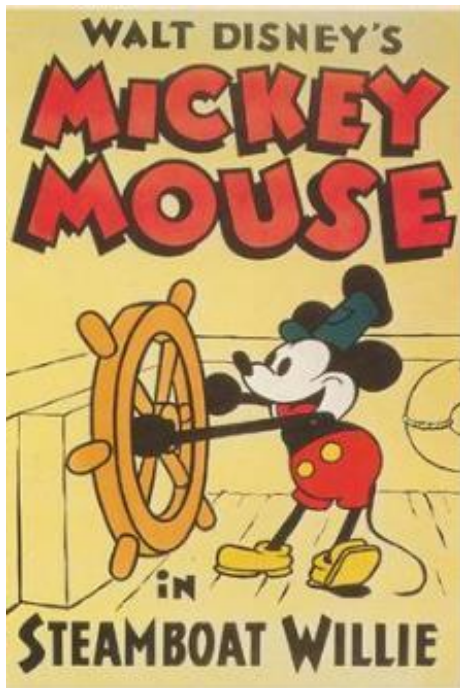


...The GNU project (1983), the Free Software Foundation(1985), and the GNU General Public License (GPL) (1989).



The Open « source » family is today a large ecosystem, using several series of licences from copyleft (GNU GPL...) to permissive ones (BSD, MIT, Apache...)

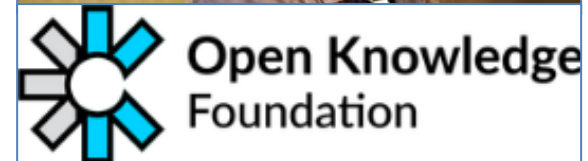
Internet & Digital revolutions / the “Open culture/knowledge” factor



The ‘Sonny Bono’
Copyright Term Extension
Act (CTEA) aka the Mickey
Mouse extension Act
(1998)



*Lawrence Lessig, the Eldred vs
Ashcroft case (2001) and Creative
Commons association (2002): to
overrule the « Copyright is
automatic, whether you want it or
not » principle*



The Open Definition

The *Open Definition* sets out principles that define “openness” in relation to data and content.

It makes precise the meaning of “open” in the terms “open data” and “open content” and thereby ensures quality and encourages compatibility between different works of knowledge material.

*Rufus Pollock, the Open Knowledge
Foundation - (2004) and the Open
Definition (2005): giving sense to
‘open’ (data, content, knowledge)
in the Digital Age*

Internet & Digital revolutions / the “Open Government” factor



The Sunlight Foundation* (2006):** “to make american government and politics more accountable and transparent to all” and ***the famous « Sebastopol meeting » (7-8/12/2007): shift from Open Government to Open Government Data and establishment of the **Heigh Principles of Open Government Data**

***The Open Government Partnership OGP* (2011) and *the G8 Open Data Charter* (2013):** the claim that Open data sit at the heart of a world fuelled by information and with enormous potentials (accountability, efficiency, innovation...)

Socio-economic leverage, the focus point of European Commission policy



PSI1 EU Directive 2003



PSI2 EU Directive 2013



PSI3 EU Directive 2019



HVD EU Act 2022



G.Vickery report 2011

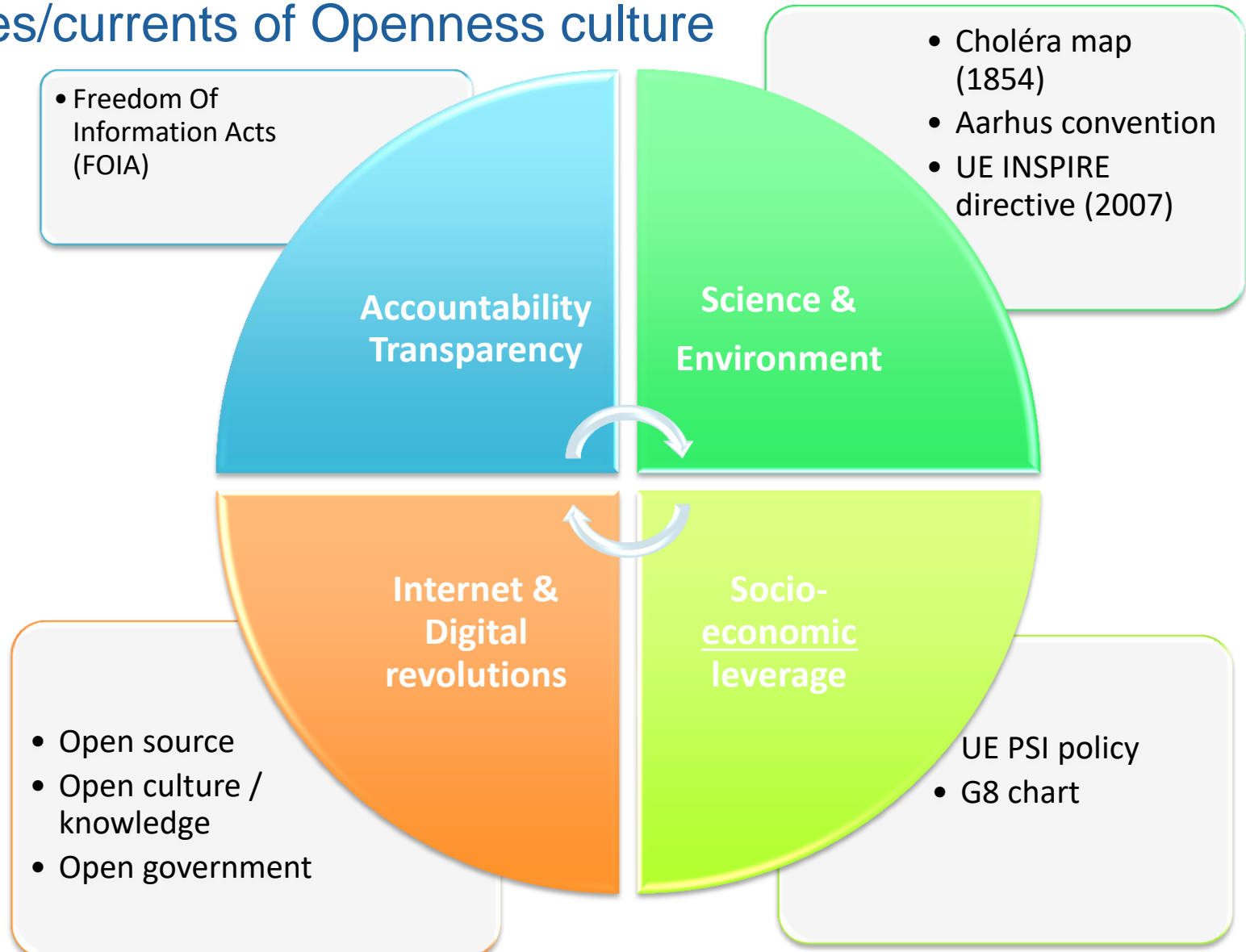


Creating Value through OD 2015



The Economic Impact of OD 2020

Sources/currents of Openness culture



Conclusion

- To be aware of trends/ currents of culture of openness is important to understand your own context (or the mindset/drivers of your interlocutors)
- Full Open data will be mandatory very soon for NMCAs EU Member States (geospatial, earth observation and environment): June 2024 (possible extension up to February 2025)

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- *Commission implementing regulation (EU) 2023/138 of 21 December 2022 laying down a list of specific high-value datasets and the arrangements for their publication and re-use* (EUR-Lex [website](#))
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- *The Economic Impact of Open Data: Opportunities for value creation in Europe* ([report](#) published by European Commission, 2020)

Thank you for your attention!



Frédéric Cantat

National Institute of Geographic and Forest
Information – IGN France

Saint-Mandé, France



Methods referent for collaborative
innovation



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