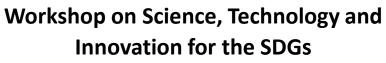
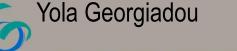
UNIVERSITY OF TWENTE.

PEACE-MAKING DATA FOR SDGS

BALANCING DATA PROTECTION AND A JUST DISTRIBUTION OF DIGITAL DIVIDENDS GLOBALLY



United Nations Conference Centre (UNCC), ESCAP, Bangkok, Thailand, 27th February – 1st March 2019



FACULTY OF GEO-INFORMATION SCIENCE AND EARTH OBSERVATION

Data for peace and justice

- Technically powerful
 - Missing population statistics
 - Missing maps
 - Tracking absence
- But, morally defensible?

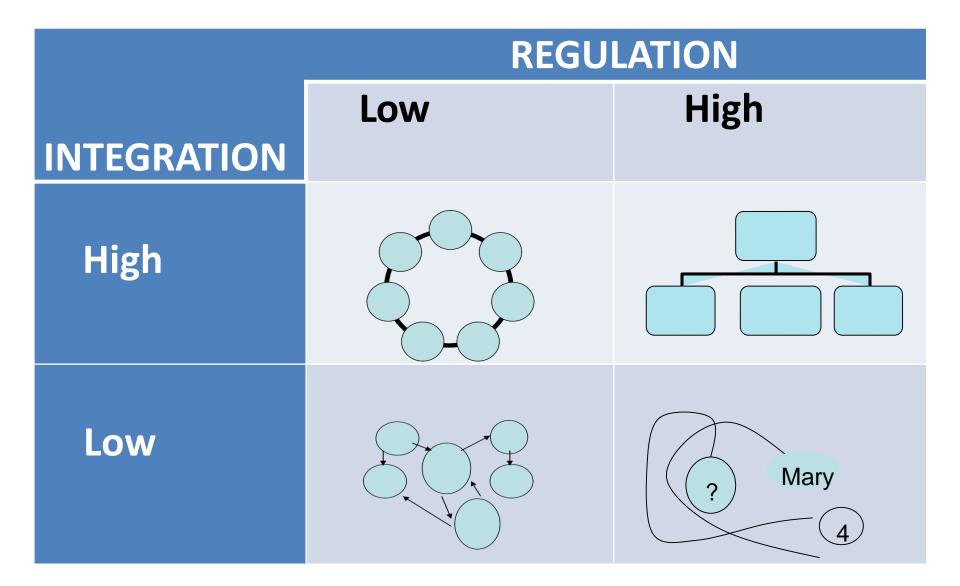
Spiderman: *"With great computing power, comes great moral responsibility"*

GDPR in EU



https://teachprivacy.com/gdpr-resources/

Cultures



Privacy cultures in the EU

REGULATION

INTEGRATION	Low	High
High	We produce & manage our data	Data-for-all law
Low	My data for a fair price	You have zero privacy, get over it!

Privacy cultures in the EU

REGULATION

INTEGRATION	Low	High
High	We produce & manage our data Data as common- pool good	Data-for-all law Data as public good
Low	My data for a fair price Data as private good	You have zero privacy, get over it! Data as club good

Malabo Convention in AU

- 2014 AU aims to establish regional and national legal frameworks for cyber-security, electronic transactions and personal data protection.
- 2018 AU data protection guidelines for Member States, broadly aligned with the GDPR
- 40% of African countries have enacted data protection legislation
- Only Kenya and South Africa have tested data protection rights in courts (Alex Makulilo 2016)

Privacy cultures in the AU

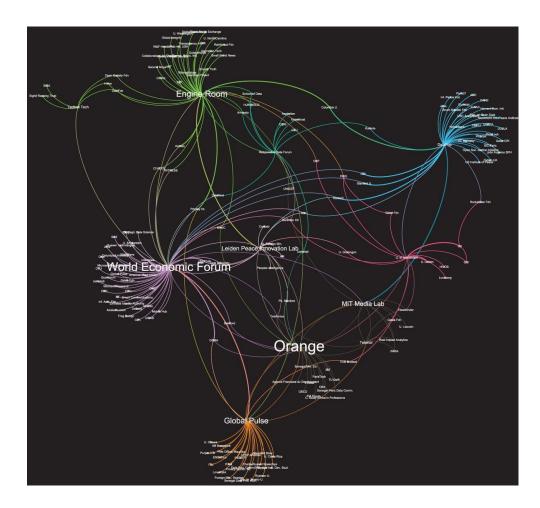


Data & strong statehood

REGULATION

INTEGRATION	Low	High
High	Gov. maintains an infrastructure to make data accessible to the public. common-pool good	Gov. uses data for surveillance and control of citizens & businesses public good
Low	Gov. has surrendered complete data value chains to the market private good	Data market is dominated by private parties strongly controlled by gov. club good

Responsible data (ResD) actors



Taylor, Linnet. 2016. The ethics of big data as a public good: which public? Whose good?, Philosophical Trans. Royal Soc. A. Vol 374, Issue 2083

	REGULATION	
INTEGRATION	Low	High
High	ResD actors maintain an infrastructure to make data accessible to the public common-pool good	ResD actors use data for surveillance and control of citizens & businesses public good
Low	Gov. has surrendered complete data value chains to the market	Data market is dominated by private parties strongly uncontrolled by ResD
	private good	club good

	REGULATION	
INTEGRATION	Low	High
High	ResD actors maintain an infrastructure to make data accessible to the public	ResD actors use data for surveillance and control of citizens & businesses
	common-pool good	public good

	REGULATION	
INTEGRATION	Low	High
High	How will the gov. use common pool goods?	Which enforceable data protection regulation?
	How will people use common-pool goods to organize and negotiate with government?	How to strengthen instead of further hollowing up the public good custodian – the state?

	REGULATION	
INTEGRATION	Low	High
High	Breach of group privacy may have serious	Which privacy cultures, in which contexts?
	implications for personal privacy.	What is legitimate personal behavior where? → personal data

Group privacy – refugees (1)



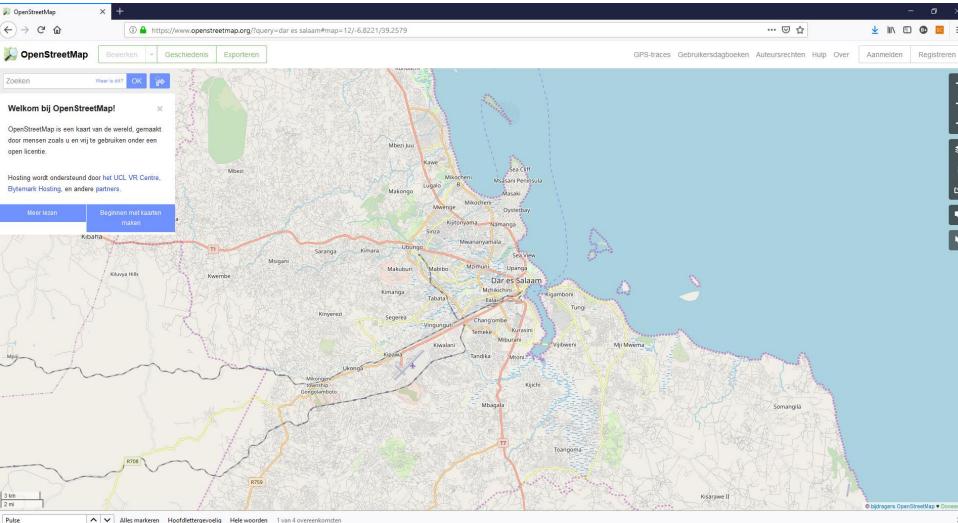
Group privacy – refugees (2)



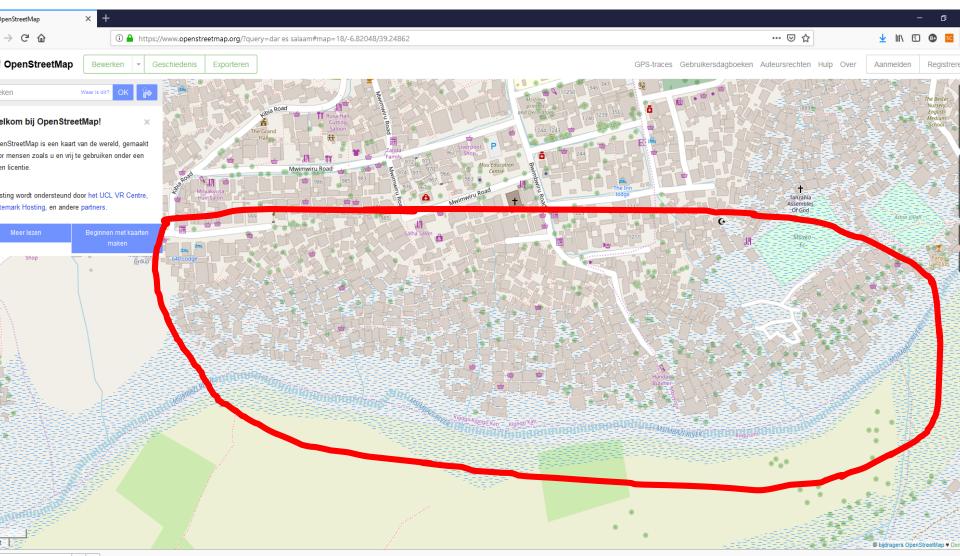
Group privacy – refugees (3)



Group privacy – flood plain dwellers (1)



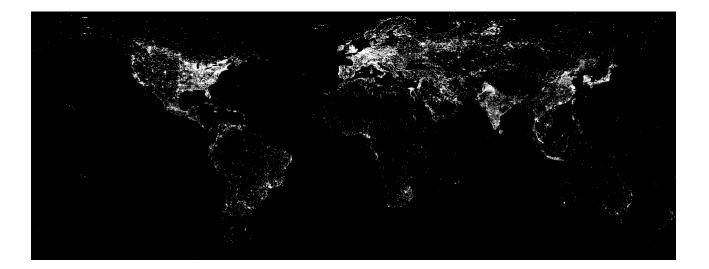
Group privacy – flood plain dwellers (2)



Night light images

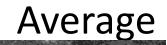
- DMSP-OLS (Defense Meteorological Satellite Program) Nighttime Lights Time Series data (1 km) is available from 1992 - 2013 (DMSP-OLS has a spatial resolution of at 0.55km at fine mode and 2.7 at smooth mode)
 - Stable lights
 - Average lights

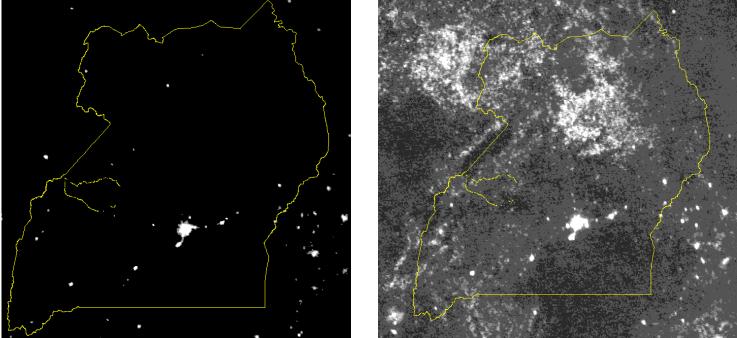
(https://ngdc.noaa.gov/eog/dmsp/downloadV4composites.html) http://www.esa.int/Our_Activities/Observing_the_Earth/Earth_from_Space_Night_lights/(print)



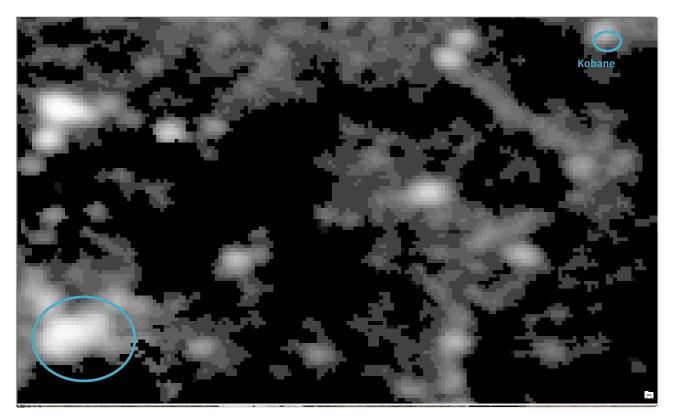
Differences between Stable and Average Nightlights Example Uganda

Stable lights





DMSP-OLS Nighttime Lights Time Series – War in Syria



Download OLS data: http://ngdc.noaa.gov/eog/dmsp/downloadV4composites.html

New York Times 2018/12/10

235 million locations captured from 1.2 million unique devices in the New York area during a three-day period in 2017. Credit Richard Harris/The New York Times

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