User-centred Approaches to Open Data
¿Quién se beneficia de los datos abiertos? Enfoque en los usuarios

Dr Ernesto Priego

Centre for Human Computer Interaction Design

City, University of London, United Kingdom

Ernesto.Priego.1@city.ac.uk

@ernestopriego

This deck of slides

- What is Open Data

- Openness as Umbrella

- User-centred approaches and examples for/using open data

- Propositions

- Some references

What is Open Data?

- *The Open Data Handbook* defines Open Data as: **"Data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike."** (Open Knowledge International, n.d.)

- **Availability and Access:** the data must be available as a whole and at no more than a reasonable reproduction cost.

- **Re-use and Redistribution:** the data must be provided under terms that permit re-use and redistribution, including the intermixing with other datasets.

- **Universal Participation:** everyone must be able to use, re-use and redistribute. There should be no discrimination against fields of endeavour or against persons or groups.

http://opendatahandbook.org/

Open Data for Civic Engagement

- "All citizens should have equal opportunities and multiple channels to access information, be consulted and participate. Every reasonable effort should be made to engage with as wide a variety of people as possible" (OECD, 2009, p.17).

- Transversal skills development- critical engagement with government, cultural heritage, scientific research, educational resources (Atenas, Havemann & Priego 2015)

- "A fundamental consequence of diminishing public trust in local government is a loss of civic engagement. Public trust and civic engagement depend on people having access to accessible data to engage." (Shapiro 2018)

Open Science / Open Data / Open Access /Open Education / Open Government

- Today we also should also ask: who benefits from Openness, and at what cost?

- Who is therefore the user of open data and open content?

- Are they being considered in the co-designing of infrastructure and processes?

© Julien Colomb, 2016:
https://www.meetup.com/Berlin-Open-Science-Meetup/photos/26645056/445567759/
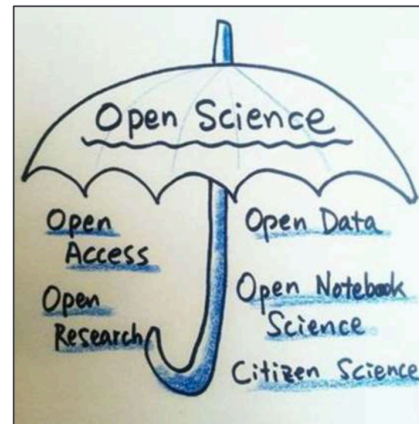
What we don't know well yet:

- Who really uses open data? What for? How? When? Where? What are their challenges and expectations?

- User-centred approaches can help- so far the user of open resources has generally not been taken into account in the design process of processes, technologies, interfaces, metrics

- User-centred design methods can help!

(User-centred design)

- Research users and what they want to do
- Develop designs and build prototypes
- Evaluate the designs

- "this isn't a one-shot deal. It´s a cycle." (UX Fundamentals, City Interaction Lab 2018)

Open Data User Persona Libraries

"Who is accessing open data — and who isn't? What do communities need that can be found in open data? Community-centered or human-centered design strategies in general can help city staff keep their stakeholders' needs within their scope of awareness as they manage open data."

Sunlight Foundation, https://sunlightfoundation.com/2018/12/20/introducing-the-open-data-user-persona-library/
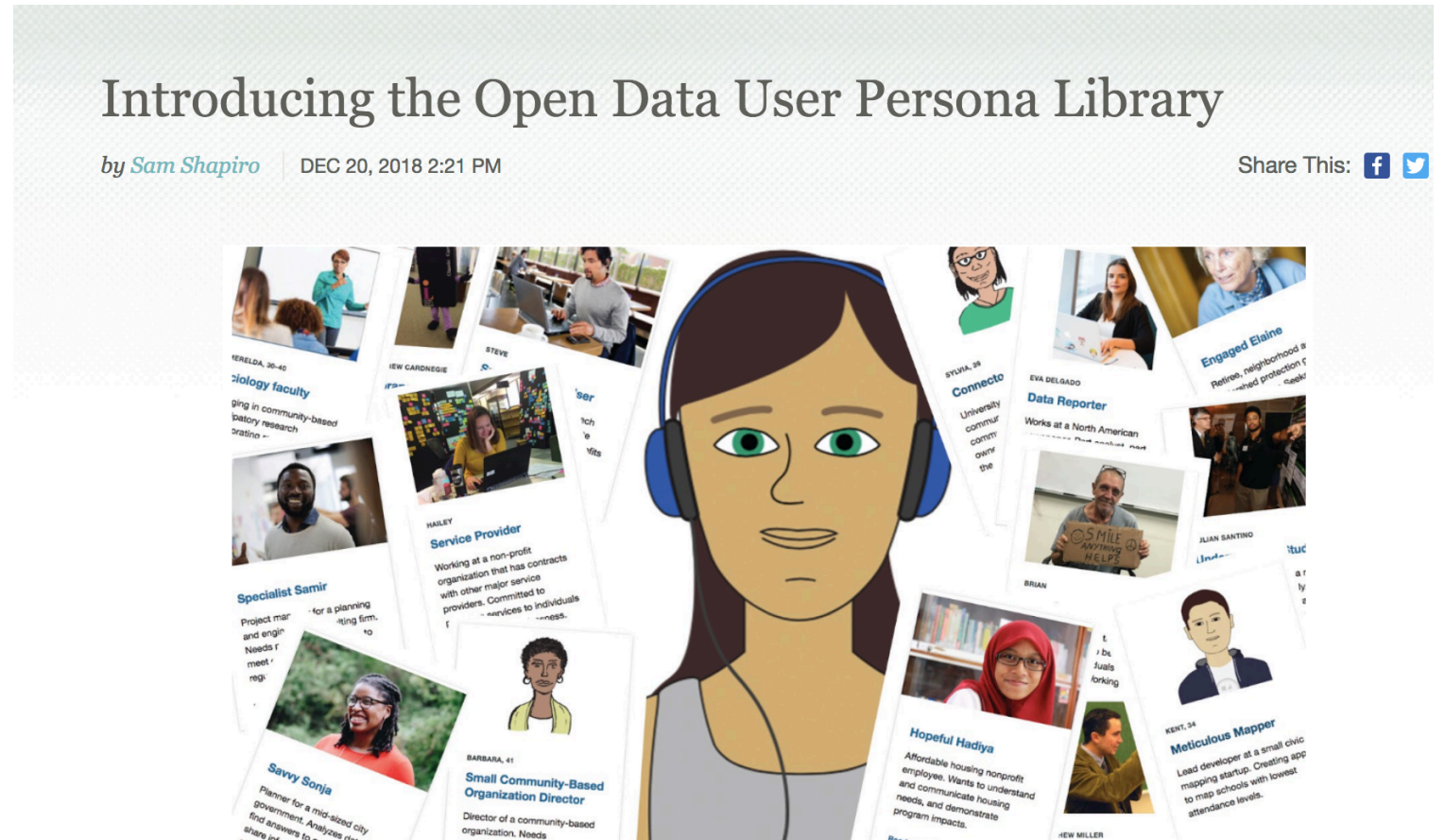
Open Metrics for Open Data

- Co-designed with users
- "We adopted a much more use
  data research using small struc
  problems and then working fro
  open data can help address the
  it is to be successful." (OGP2015)

WORLD WIDE WEB FOUNDATION

IDRC ✳ CRDI
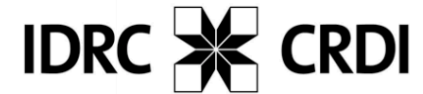
Strengthening the evidence-base for open government in developing countries

Open Government Partnership

User Centred Methods for Measuring the Value of Open Data

https://www.opengovpartnership.org/documents/user-centred-methods-for-measuring-the-value-of-open-data/

User-Centric Evaluation of UK Non-Print Legal Deposit

"Users increasingly rely upon personal devices and specialist software, and remote access to materials, whereas NPLD was designed to mirror access to print legal deposit collections." (Gooding, Terras, Berube 2019)

http://eprints.gla.ac.uk/186755/

Reusing Open Data for New Audiences:
Parables of Care. Creative Responses to Dementia Care, as Told by Carers (Grennan, Sperandio, Wilkins, Priego 2017)
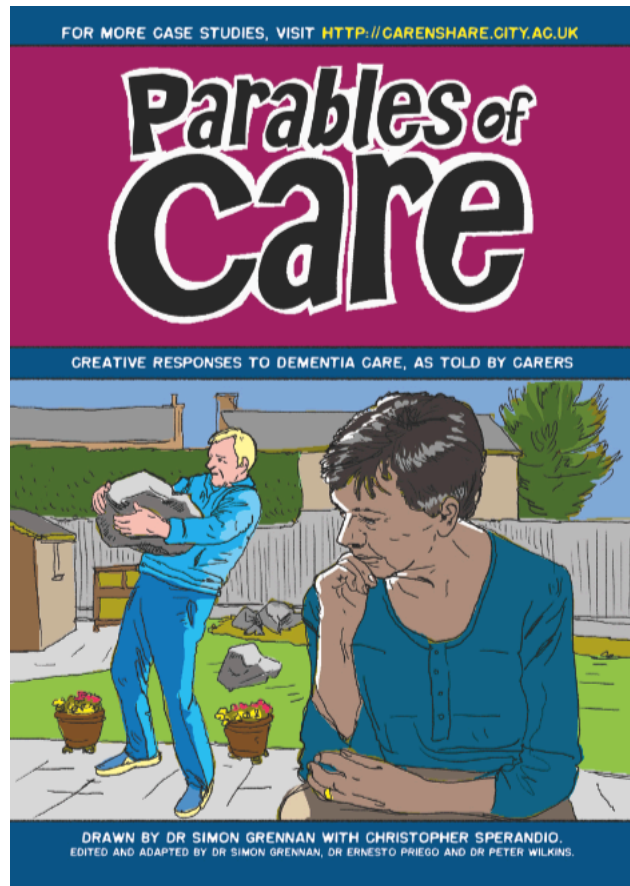
Parables of Care explores the potential of comics to enhance the impact of dementia care research. Project led from Centre of HCID, City, University of London, with the University of Chester and Douglas College, Canada.

The 16-page co-designed publication presents in comics form true stories of creative responses to dementia care, as told by carers, co-designed with stakeholders and adapted from a group of over 100 open case studies available at http://carenshare.city.ac.uk.

It can be downloaded Open Access from
http://openaccess.city.ac.uk/18245/

Cases from Open Data - Care N Share App Centre for HCID, City, University of London

"There are 850,000 people with dementia in the UK, with numbers set to rise to over 1 million by 2025. This will soar to 2 million by 2051. 225,000 will develop dementia this year, that's one every three minutes. 1 in 6 people over the age of 80 have dementia."

Facts for the media | Alzheimer's Society
https://www.alzheimers.org.uk/about-us/news-and-media/facts-media

CareNShare

about   help   contact   input case

The Care'N'Share website provides you with access to good care practices in residential, live-in, domiciliary, acute, day service and family care. It automatically retrieves good care practices in response to a current care situation that you are encountering. It then guides you to reflect and create new ideas about the care that you need to deliver.

1. Describe current situation
2. Reflect on good care practices
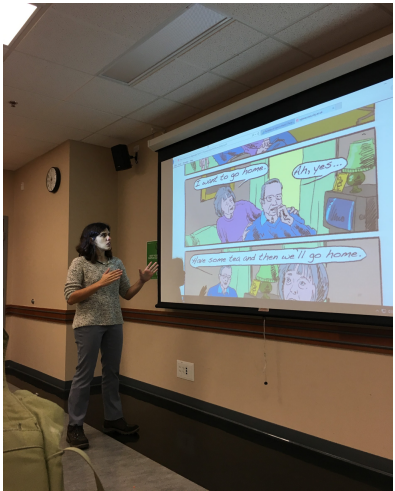3. Create new care plan for situation

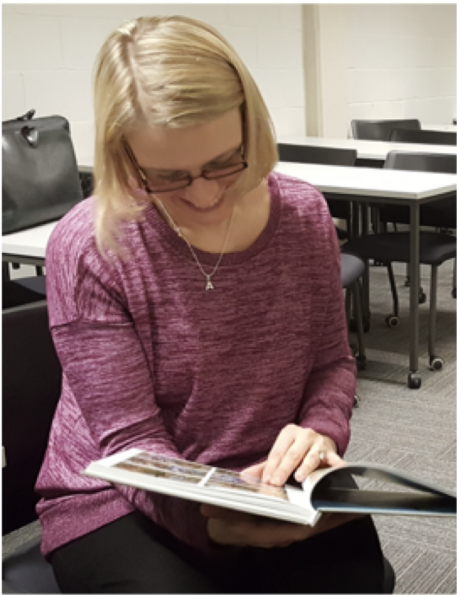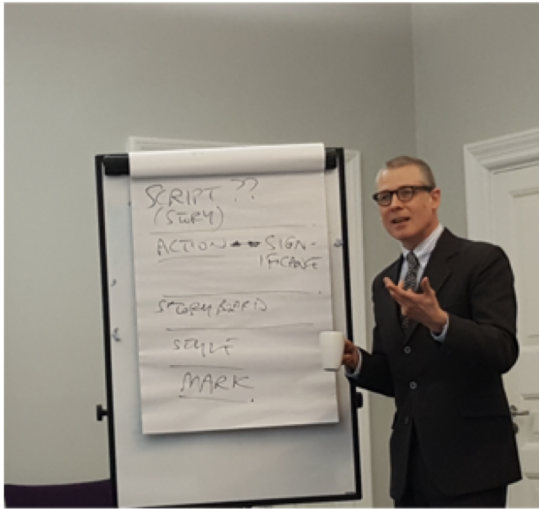http://carenshare.city.ac.uk/   (Zachos, Maiden et al 2013)

From Open Data Set to Comic Book- London and Vancouver 2017-2019

Find out more at https://blogs.city.ac.uk/parablesofcare/

Production of Knowledge: What's Wrong with These Pictures?
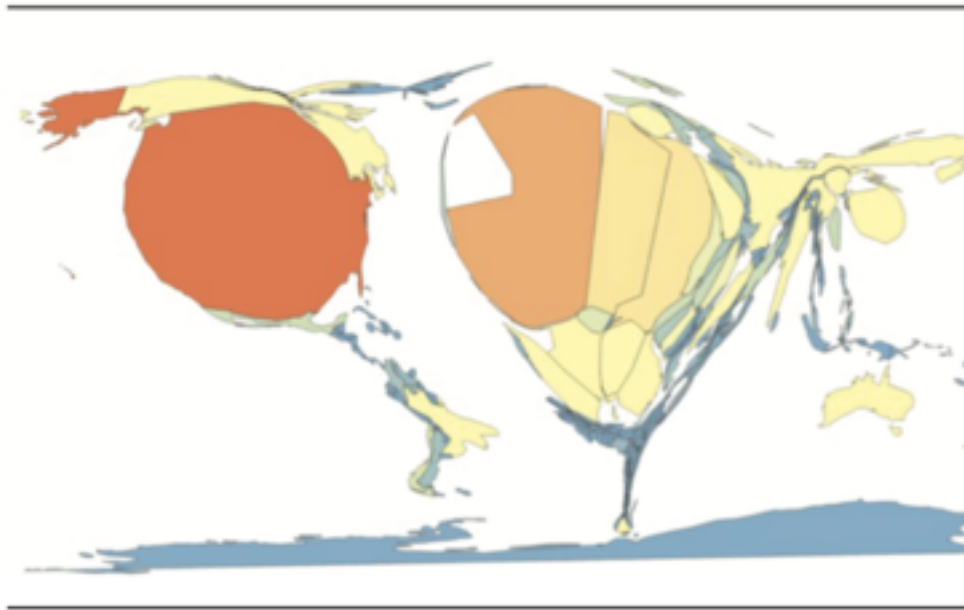
(Alperin 2014)
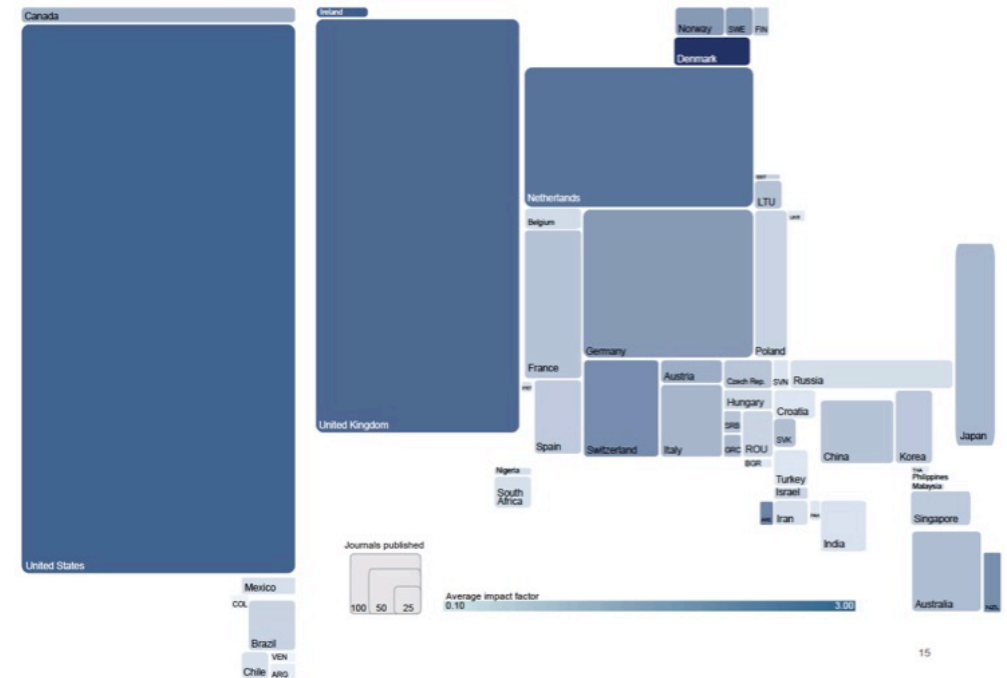
(Graham, Hale and Stephens 2012)

Cfr Priego and Fiormonte 2018

Open Access Kidnapped

- For-profit publishers have embraced Open Access models through a variety of often-contradictory licensing schemes, financed by Article Processing Charges where the author pays to open outputs up

- Hybrid Publishing (paywalled journals that also offer Open Access 'options' incur in double-dipping, where libraries and academics pay twice for the same content

- Opacity of pricing (sometimes only obtainable via FOI requests) that frustrate competition, transparency, critique and accountability

- Reputational value remains the most valuable bargaining chip for for-profit publishers

- Average Article Processing Charge paid by UK institutions for a "hybrid" journal open access article: £1762 (Lawson et al, 2015)

Propositions

- Open Access to research and data as a strategy and set of scholarly values remains desirable for the Global South- the legacy subscription model creates further inequality.

- Open Access / Open Data is not just about business models (how to finance scholarly publishing or content infrastructures), but about a specific type of research/communication cycle.

- User-centred design of open infrastructures and related reward and assessment cultures can help tackle these challenges, but UCD, sharing data and preprints all takes time, effort, skill, money.

.

Propositions

- Open Access and Open data require specific modes of licensing that can offer different degrees of openness as currently defined, as long as they don't short-circuit the goals of open science.

- We won't be able to transform scholarly communication business models, or government participation models towards greater equality until we transform traditional workflows and IP paradigms so they embed user-centred approaches to openness first.

- For it not to foster further inequality, user-centred openness must be embedded in the whole research/communication cycle (this means also transparency, accountability, reproducibility) and covers metrics and methods of assessment too

Propositions

- Internationally, we don't know yet how to *really* share-- and our methods of assessment, our ongoing appreciation of reputational and financial value are still based on vertical, exclusionary, closed-up structures- more equality via openness means a challenge to privileged elites.

- The skills, reward infrastructures and context enabling a culture of sharing data and research and encouraging its reuse it is still not evenly distributed, creating new elites and new divides.

Some References

Alperin, JP., Babini, D., Fischman, G. (eds.) 2014. Open access indicators and scholarly communications in Latin America (Buenos Aires: CLACSO, First edtion). Available in full text on the Web Virtual Library of CLACSO: www.biblioteca.clacso.edu.ar

Atenas, J. (2016) Putting research into practice: Training academics to use Open Data as OER: An experience from Uruguay. Thoughts on Open Education. Retrieved from https://oerqualityproject.wordpress.com/2016/07/13/putting-research-into-practice- training-academics-to-use-open-data-as-oer-an-experience-from-uruguay/

Atenas, J., Havemann, L., & Menapace, A. (2017). Open Data and media literacies: Educating for democracy. In OER17: The Politics of Open, April 5-6, 2017. London. Retrieved from http://eprints.bbk.ac.uk/18959/

Atenas, J., Havemann, L., & Priego, E. (2015). Open data as open educational resources: Towards transversal skills and global citizenship. Open Praxis, 4, 377-389. Retrieved from https://www.openpraxis.org/index.php/OpenPraxis/article/view/233/180

Fiormonte, D. 2017. Digital Humanities and the Geopolitics of Knowledge. Digital Studies/Le champ numérique, 7(1). Available at: https://doi.org/10.16995/dscn.274

Fiormonte, E. & Priego, E., 2016. Knowledge Monopolies and Global Academic Publishing. The Winnower. Available at: https://doi.org/10.15200/winn.147220.00404

Graham, et al, M., 2011. Visualizing the uneven geographies of knowledge production and circulation. Global Higher Education, 14.9. Available at: https://globalhighered.wordpress.com/2011/09/14/visualizing- the-uneven-geographies-of-knowledge-production-and-circulation/

Lawson, S., Gray, J., Mauri, M., (2016). Opening the Black Box of Scholarly Communication Funding: A Public Data Infrastructure for Financial Flows in Academic Publishing. Open Library of Humanities. 2(1), p.e10. DOI: http://doi.org/10.16995/olh.72

Some References

Priego, E. and Fiormonte, D. 2018. Empire and Scholarly Communications. Multinational Monopolies of Knowledge and the Global South. Available at:

https://doi.org/10.6084/m9.figshare.6634484.v8

Priego, E.; Havemann, L.; Atenas, J. 2014 Source Dataset for Online Attention to Digital Humanities Publications (#DH2014 poster). Available at:

http://dx.doi.org/10.6084/m9.figshare.1094359

Priego, E. et al. 2014. Online Attention to Digital Humanities Publications (#DH2014 poster). Available at: https://doi.org/10.6084/m9.figshare.1094345.v1

Eve, M. and Priego, E. (2017). Who is Actually Harmed by Predatory Publishers?. tripleC: Communication, Capitalism & Critique. Open Access Journal for a Global Sustainable Information Society, 15(2), pp. 755-770. Available at: http://openaccess.city.ac.uk/id/eprint/18007

Priego, E. et al. 2017. Scholarly Publishing, Freedom of Information and Academic Self-Determination: The UNAM-Elsevier Case. Available at:

https://doi.org/10.6084/m9.figshare.5632657.v1