

2017 Pure International Conference

Visualising Pure Data

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UNIVERSITY OF COPENHAGEN



Visualising Pure Data

Quick bio

- Unit co-ordinator, Research Documentation, Faculty of SCIENCE
- Pure co-ordinator, University of Copenhagen Libraries
- Worked with Pure since inception at DK universities (2004/5)

- Pure data is a vital asset in research documentation: performance evaluation, impact, do we fullfill government requirements, Open Access (Pure only data source), documentation for funding applications, ORCID profiles, ...

Visualising Pure Data

Agenda

- ① Background: SCI-Metrics
- ② Work- & Dataflows
- ③ Types of visualisations
 - Dashboards
 - Networks
 - Charts & Graphs
 - Infographics
- ④ DEFF project, visualisation issues

Visualising Pure Data

Background

Background: why visualise?

Wanted easier, increased access to Pure → **SCI-Metrics**

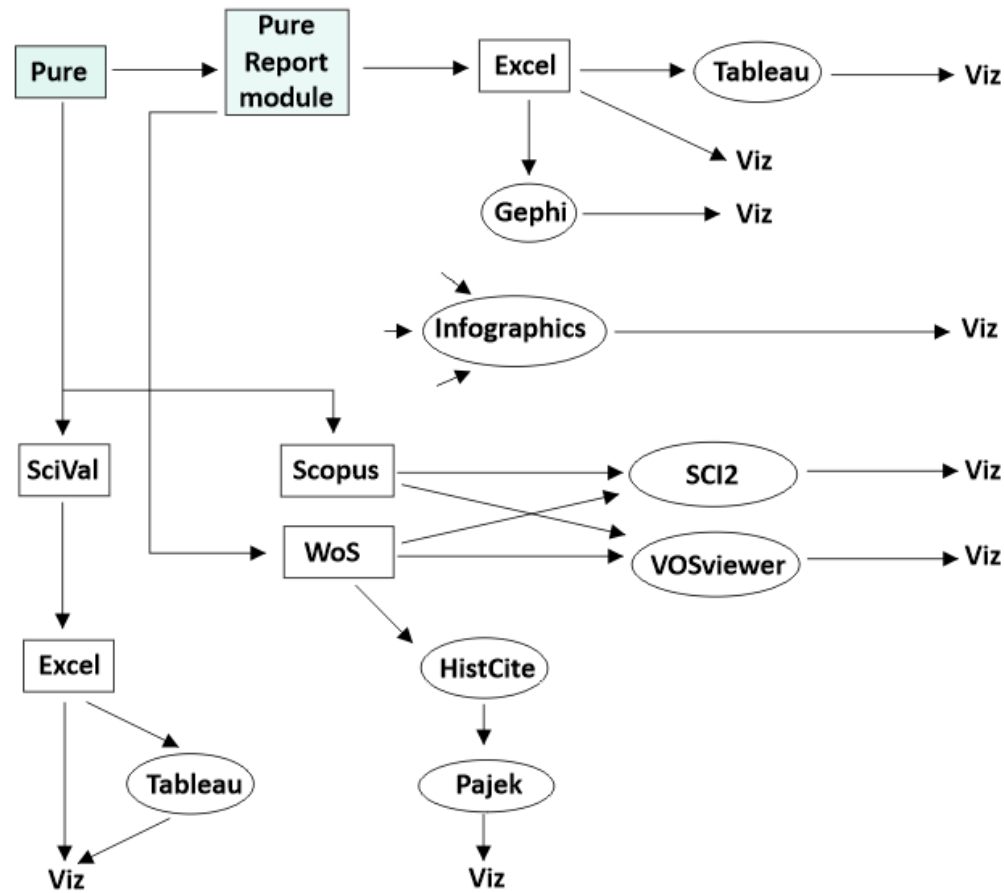
Usage: No login, No Pure, Better **pretty pictures** and **Dashboards** (help yourself)

University of Copenhagen implementing Tableau Server → Tableau Desktop

Pure and data requirements: data from Pure, updating, format

Visualising Pure Data

Data- & Workflows



Visualising Pure Data

Types of Visualisations (homebrewed classification!):

Dashboards (interactivity), Charts & Graphs, Networks, Infographics

Work in these areas (just beginning):

1. **Dashboards:** Interactivity, department help-yourself buffet. Fits with yearly reporting on publication output
2. **Charts & Graphs:** primarily to enhance reports where appropriate. Eg. spread of department data rather than single metrics, Impact Factor/CiteScore, citations
3. **Networks:** Explaining & examining complex collaboration patterns
4. **Infographics:** Illustrating complex work- & dataflows

Examples follow...

Visualising Pure Data

Dashboards:

Pure report module: one spreadsheet- all dashboards, no fiddling with data/spreadsheet because of updating, All fiddling to be done in dashboard application.

TABLE: Publications Ordering: ↑ Title [Preview](#)

| Groupings | Columns | | | | | | | | | | | | | | | |
|--|---|-------|------------------|---------|------------------|---------|----------|---------|-----|---------|--------|---|-------|-----|---------|--------|
| | <table border="1"> <thead> <tr> <th>Title</th> <th>Type</th> <th>pages</th> <th>Publication date</th> <th>Visible</th> </tr> </thead> <tbody> <tr> <td>RAG Test</td> <td>Article</td> <td>n/a</td> <td>1/01/10</td> <td>Public</td> </tr> <tr> <td>An experimental and finite element study of the low-cycle fatigue failure of steel lighting columns</td> <td>Paper</td> <td>n/a</td> <td>1/01/09</td> <td>Public</td> </tr> </tbody> </table> | Title | Type | pages | Publication date | Visible | RAG Test | Article | n/a | 1/01/10 | Public | An experimental and finite element study of the low-cycle fatigue failure of steel lighting columns | Paper | n/a | 1/01/09 | Public |
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| <p>Authors > Organisations > Organisational unit ⚙️</p> <p>+ Click + to add custom columns</p> <hr/> <p>Current publication status > Date > Year ⚙️</p> <p>+ Click + to add custom columns</p> <p>+ </p> | <p>Type Journal > Journal Submission year Title of the contribution in original language UUID</p> <p>+ Click + to change default output + Click + to change default output</p> <hr/> <p>Id Electronic version(s) of this work > DOI (Digital Object Identifier) Other links Peer-reviewed</p> <p>+ Click + to change default output</p> <hr/> <p>Original language Number of pages Main Research Area Publication category Journal > Journal > RoMEO color</p> <p>+ Click + to change default output</p> <hr/> <p>Publisher Workflow > Step Current publication status > Status Created Creator</p> <p>+ Click + to change default output + Click + to change default output</p> <hr/> <p>Modified by Source Source-ID Managing organisational unit</p> <p>+ Click + to change default output</p> <p>+ </p> | | | | | | | | | | | | | | | |

y-axis

Visualising Pure Data ☒ Dashboards

SCI-Metrics:Article publications:

SCI-Metrics
Number of article publications 2008 - 2014

| | Dept. of Biology | Dept. of Chemistry | Dept. of Computer Science | Dept. of Food and Resourc... | Dept. of Food Science | Dept. of Geoscience and Nat.. | Dept. of Mathematical Scienc.. | Dept. of Nutrition, Exercise .. | Dept. of Plant and Environme.. | Dept. of Science Education | Natural History Museum .. | The Niels Bohr Institute |
|------------------------|------------------|--------------------|---------------------------|------------------------------|-----------------------|-------------------------------|--------------------------------|---------------------------------|--------------------------------|----------------------------|---------------------------|--------------------------|
| Journal article | 3.038 | 1.285 | 265 | 541 | 980 | 1.809 | 575 | 969 | 1.681 | 70 | 1.642 | 3.818 |
| Review | 43 | 5 | | 4 | 17 | 3 | 1 | 46 | 11 | | 3 | 8 |
| Letter | 34 | 3 | | 1 | 1 | 7 | 2 | 14 | 14 | | 6 | 9 |
| Conference article | 5 | 3 | 37 | 2 | 17 | 19 | 4 | 2 | 44 | | 8 | 96 |
| Article in proceedings | 6 | 3 | 407 | 68 | 21 | 64 | 26 | 15 | 36 | 27 | 7 | 72 |

SCIENCE Depart...
Dept. of Biology

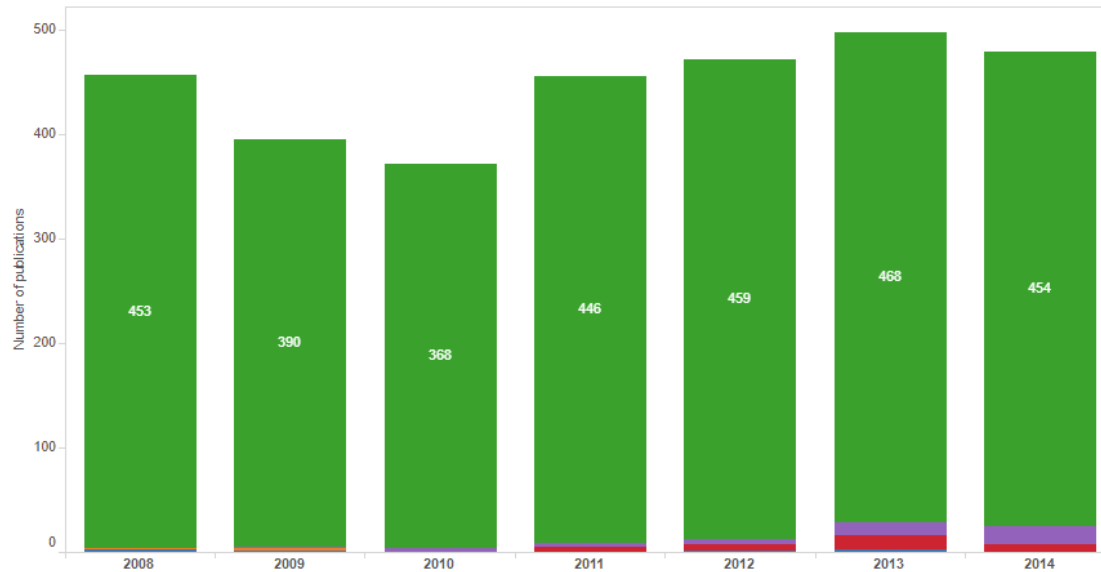
Publication type
(All)

Peer review status
Peer reviewed

Publication year
(All)

- Publication types
- Journal article
 - Review
 - Letter
 - Conference article
 - Article in proceed...

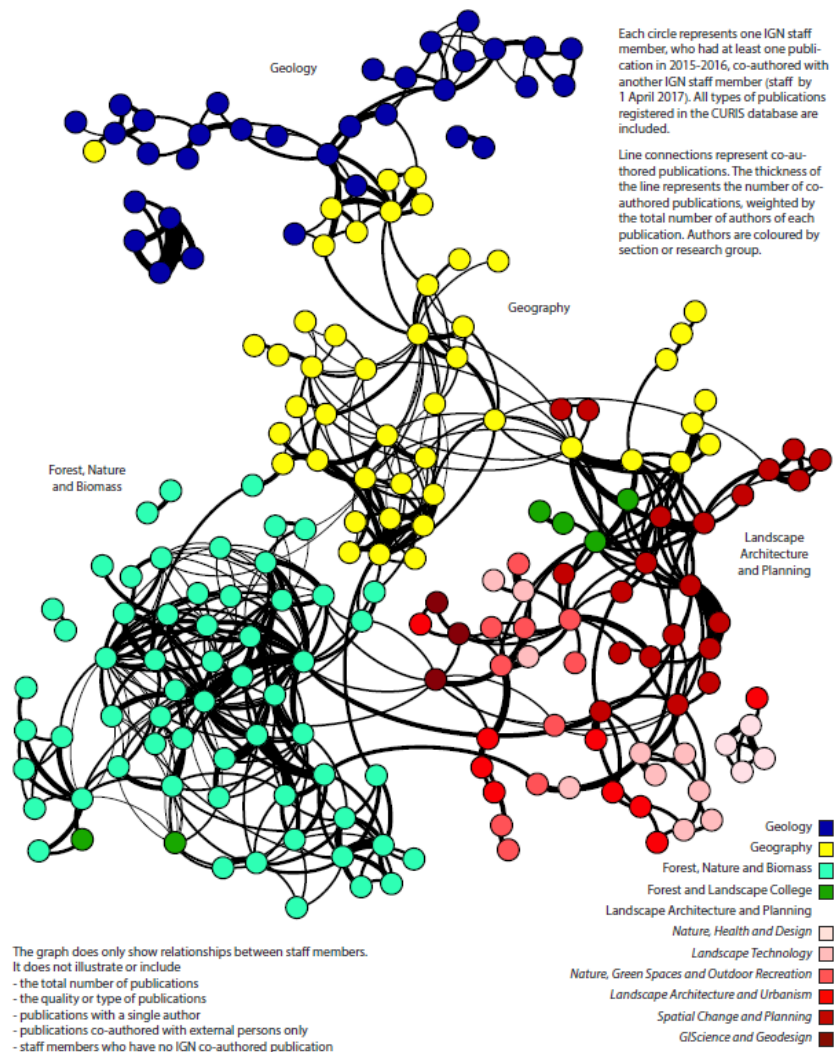
SCI-Metrics



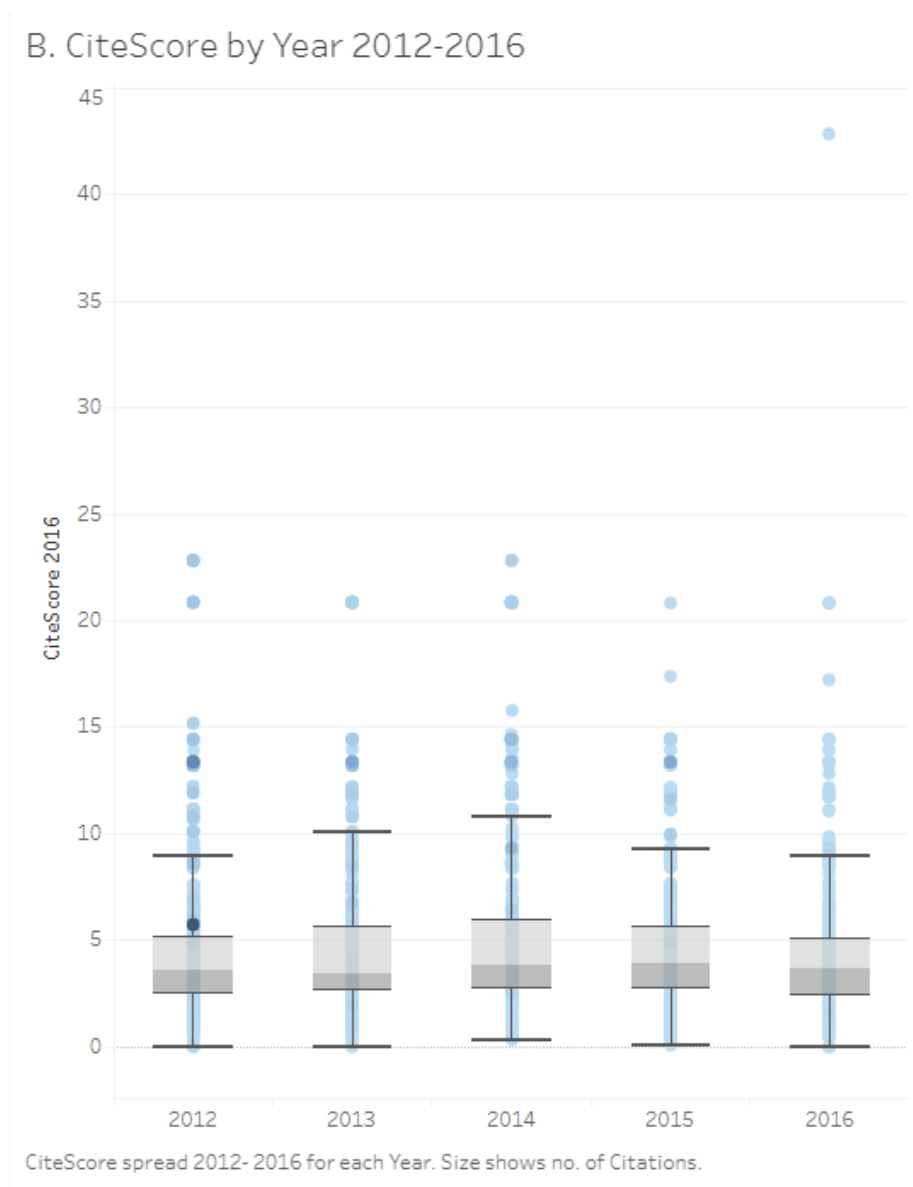
University of Copenhagen, Faculty of SCIENCE
SCIENCE Research Documentation
Last update: 24-02-2015 04:04:50

Visualising Pure Data & Pure data & Networks

Co-authored publications within IGN, 2015-2016



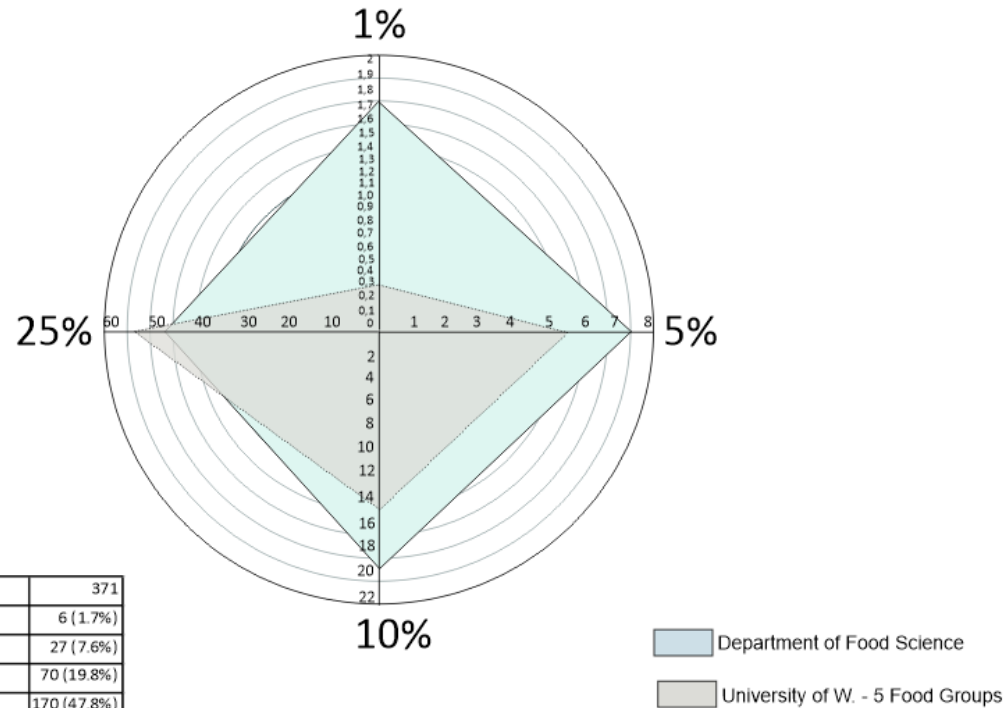
Visualising Pure Data ☒ Charts & Graphs (1)



Visualising Pure Data & Charts & Graphs (2)

Prototype...work in progress...

Department of Food Science
Articles in Top 1%, 5%, 10% and 25% citation percentiles 2013-2014



| | |
|------------------------------------|-------------|
| Total number of publications | 371 |
| Publications in Top 1% (%) | 6 (1.7%) |
| Publications in Top 5% (%) | 27 (7.6%) |
| Publications in Top 10% (%) | 70 (19.8%) |
| Publications in Top 25% (%) | 170 (47.8%) |
| Citations per publication | 8.6% |
| Publications without citations (%) | 12 (3.2%) |

Visualising Pure Data & Infographics

Publishing, Open Access, databases, CURIS, researcher IDs

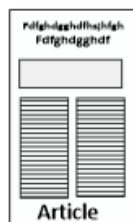
Publish

- 2 Where to publish. Consider Impact, Quality, Open Access

Open Access is required by grants from EU and public funding in Denmark. Choose OA route:
 1.Green: upload to CURIS if allowed
 2.Gold/Hybrid: pay for OA

- 3 Ensure correct and complete use of name forms and affiliations to ensure retrieval and attribution over time:

Name: Surname, First name
 Email: abc@xxxx.ku.dk
 ORCID: 0000-0002-1825-0097
 Organisation: UNI, FAC, DEPT, (SEC)



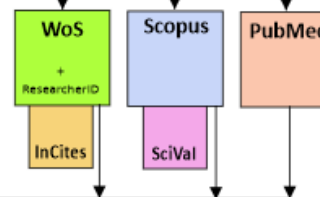
Send to publisher



Name: Surname, First name
 Email: abc@xxx.ku.dk
 ORCID: 0000-0002-1825-0097
 Organisation: UNI, FAC, DEPT, (SEC)
 DOI: 10.1234/1234567890

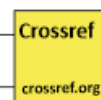
Databases

- 4 Publications are indexed by databases. To search your publications with IDs in WoS, go to Advanced search: AI=0000-0002-1825-0097 AI=[Your ResearcherID]



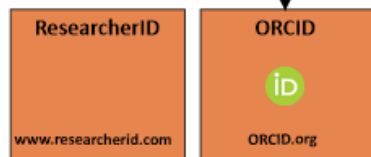
- 8 Crossref can update ORCID, for example older publications or publications not in CURIS. Signin with ORCID: search.crossref.org and search your publication.

Crossref is an ORCID Trusted party



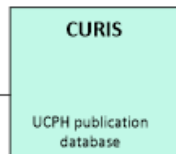
DOI from Crossref to publisher/publication

Get researcher IDs



- 7 If authorised, CURIS will update ORCID automatically. ORCID will be updated if Publications are set as Published or Epub and Accepted or Validated in CURIS.

CURIS is an ORCID Trusted party



- 5 CURIS is updated from databases. CURIS is updated for SCIENCE researchers by SCIENCE Research Documentation. You can also send your publications for registration in CURIS to: www.library.science.ku.dk/forskdkok_kopi/curis/instforms/

All articles are uploaded in full text, and if OA are made publically available for all.

- 6 Below the ORCID which you have added to your CURIS profile, you can authorise CURIS to export publications to ORCID automatically and nightly.

- 1 Get an ORCID and a ResearcherID. A good method is first to register for a ResearcherID and then get an ORCID through ResearcherID. Add ORCID to CURIS once and for all. When in ResearcherID search for your publications and add to ResearcherID. You can also add to ResearcherID from WoS. Tip: Wait before exchanging data with ORCID. (See step 5 and 6)

If you need help:
 Contact SCIENCE Research Documentation
<http://bibliotek.science.ku.dk/forskdkok/>



Created by: Adrian Price
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 University of Copenhagen
 ap@science.ku.dk (version 2.1 17.08.17)

Visualising Pure Data

DEFF project (Denmark's Electronic Research Library):

ROI-AV – Research Output and Impact – Analysed and Visualised

Visualisation training: basic concepts, types, awareness, experiments

Tools: vast amounts of tools:

Tableau, Qlik-View, D3.js, Vega/Vega-lite, VOSviewer, Gephi, Processing...

We're only just starting...

Issues:

When - & when not - to visualise

How to visualise bibliometric data

Data and data sources

Data transformation (cleaning & formatting)

Effectiveness: 12 departments, 12 reports → programming probably required!

Visualising Pure Data

!
?

It would be good to hear from others working in this field!

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