Rasmuson Theater, 1.45 - 3pm

Indicators of SSH impact

Kenneth Prewitt (Chair)
Sarah de Rijcke
Norman Bradburn
Eric Moran

Indicators of SSH impact

Kenneth Prewitt (Chair)

President, American Academy of Political and Social Science

Indicators of SSH impact

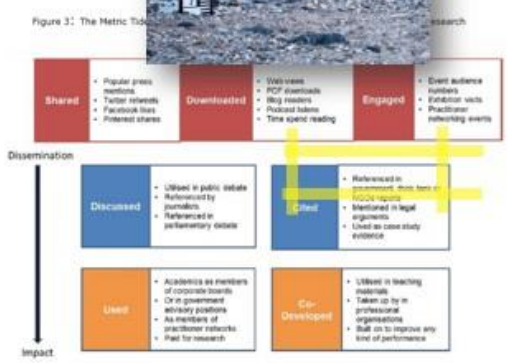
Sarah de Rijcke

Director of the Centre for Science and Technology Studies (CWTS), Leiden University, the Netherlands

CWTS
Meaningful metrics

Indicators of SSH Impact: societal connectedness

Prof. Sarah de Rijcke | 17 October 2019



Source: Wilsdon, 2016

https://responsiblemetrics.org/the-metric-tide/

- 1) Quantitative evaluation should support qualitative, expert assessment.
- 2) Measure performance against the research missions of the institution, group or researcher
- 3) Protect excellence in locally relevant research.
- 4) Keep data collection and analytical processes open, transparent and simple.
- 5) Allow those evaluated to verify data and analysis.
- 6) Account for variation by field in publication and citation practices.
- 7) Base assessment of individual researchers on a qualitative judgement of their portfolio
- 8) Avoid misplaced concreteness and false precision.
- 9) Recognize the systemic effects of assessment and indicators
- 10) Scrutinize indicators regularly and update them.

http://www.leidenmanifesto.org/

http://ec.europa.eu/research/openscience/pdf/report.pdf

https://rio.jrc.ec.europa.eu/en/library/mle-open-science-altmetrics-and-rewards-final-report

DORA

Evaluations: a crucial bridge

Policy

SSH

shopfloor

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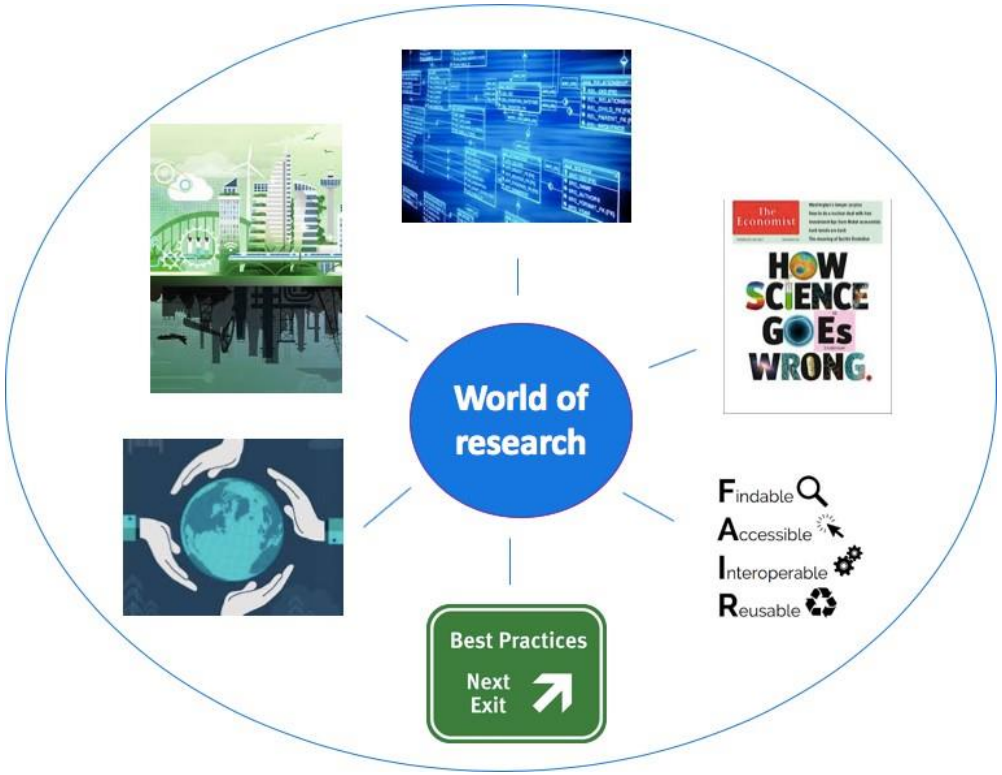
World of research
The Economist
HOW SCIENCE GOEs WRONG.
Findable
Accessible
Interoperable
Reusable
Best Practices
Next Exit

The streetlight effect

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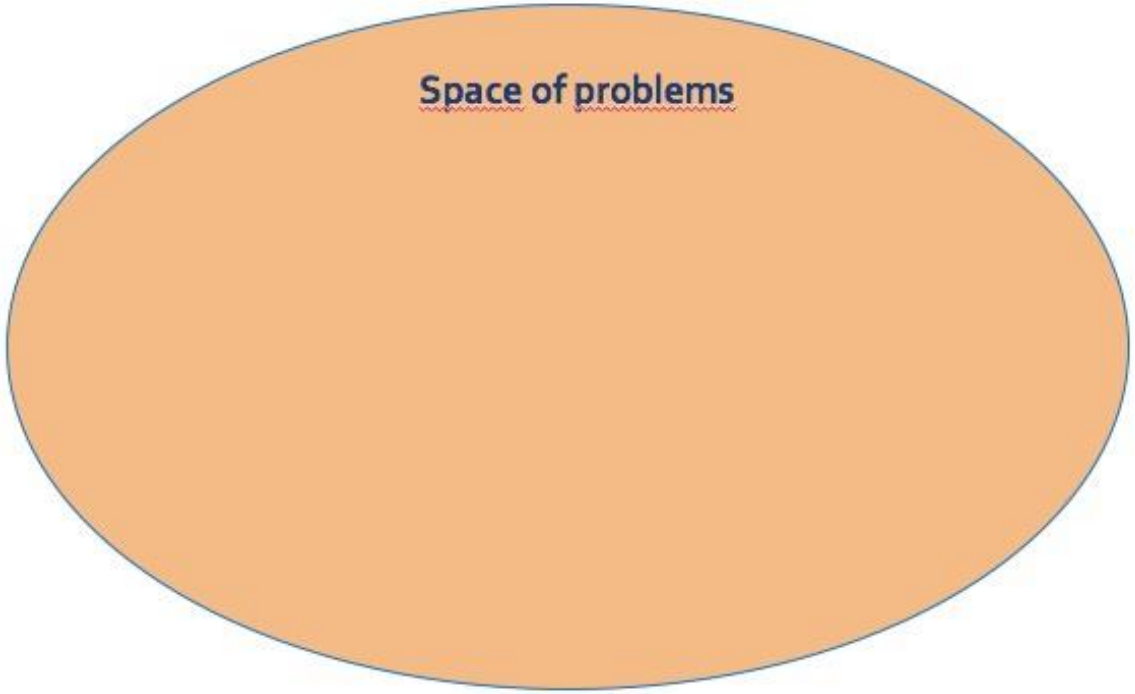
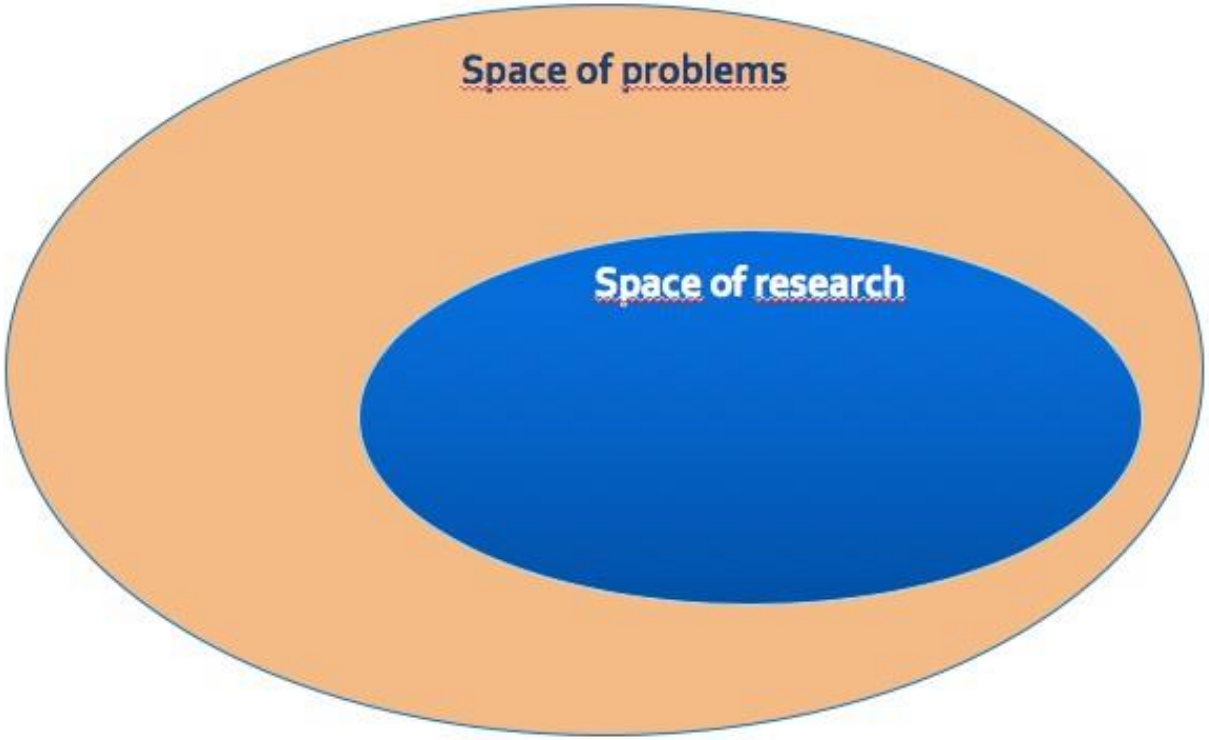
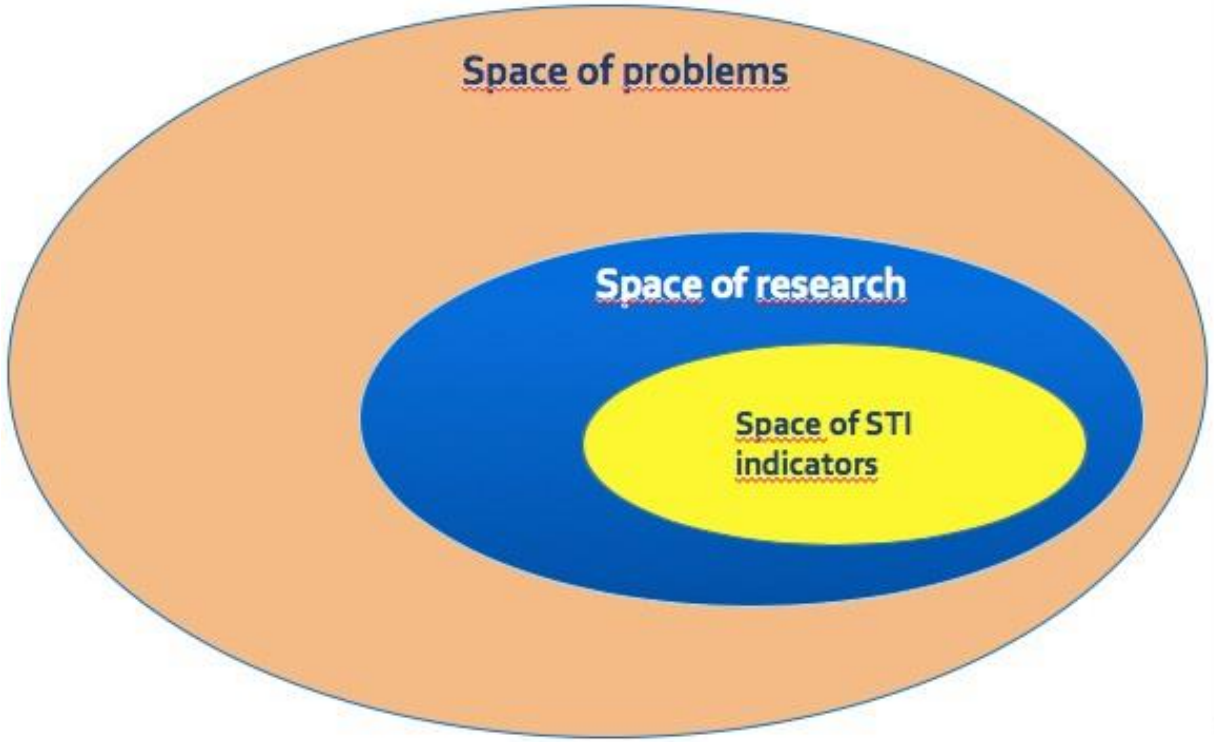
Problems, research, and indicators



Problems, research, and indicators



Problems, research, and indicators



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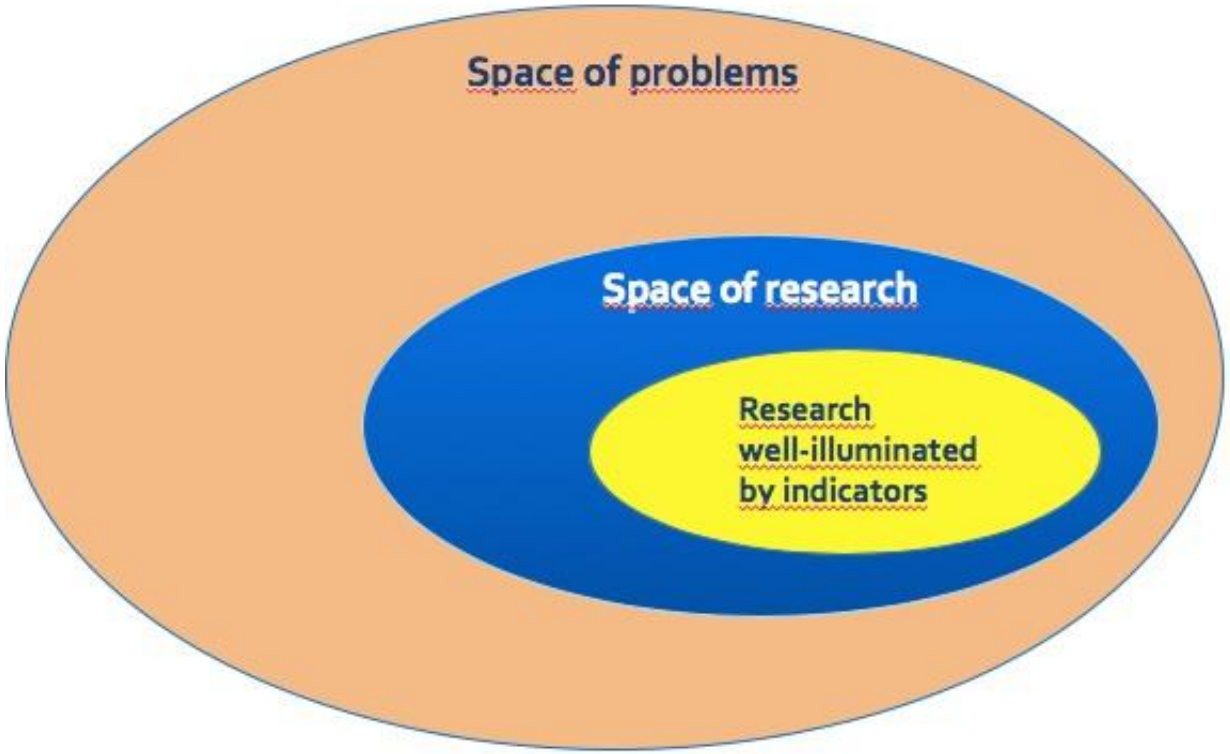
Problems, research, and indicators



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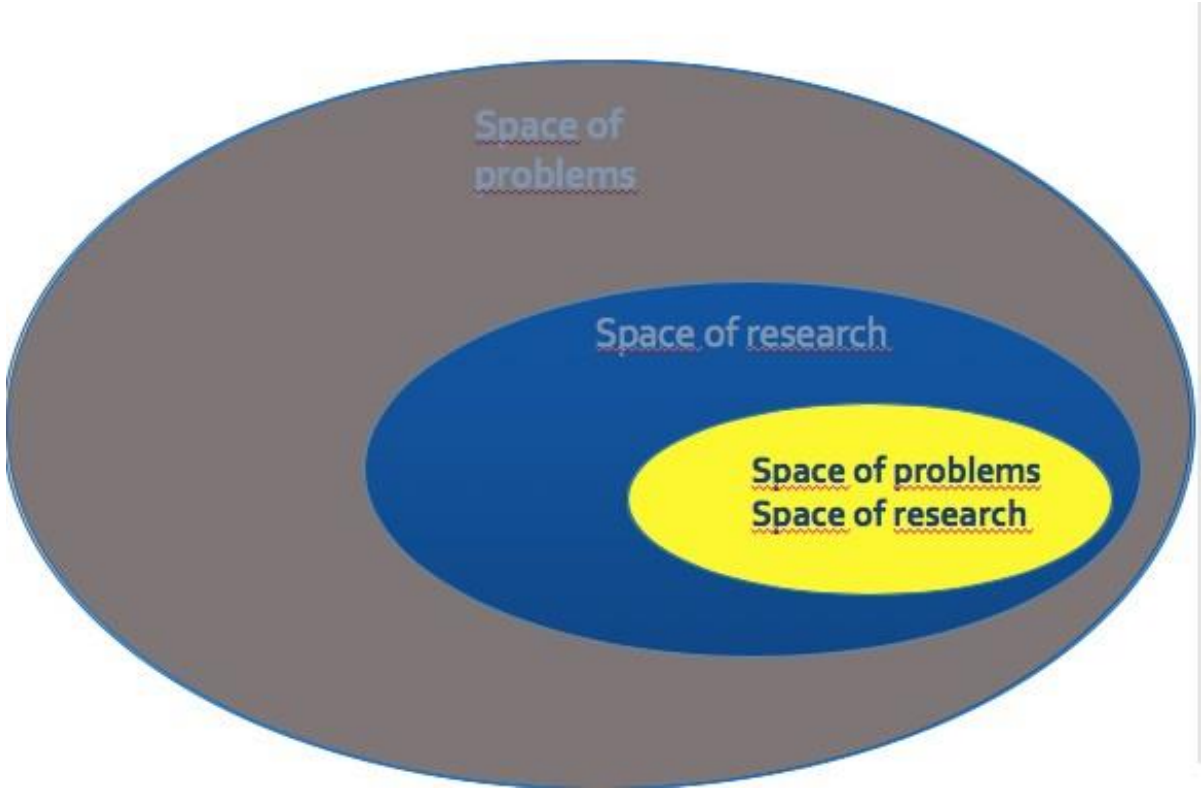
Streetlight effect: mistaking light with problems



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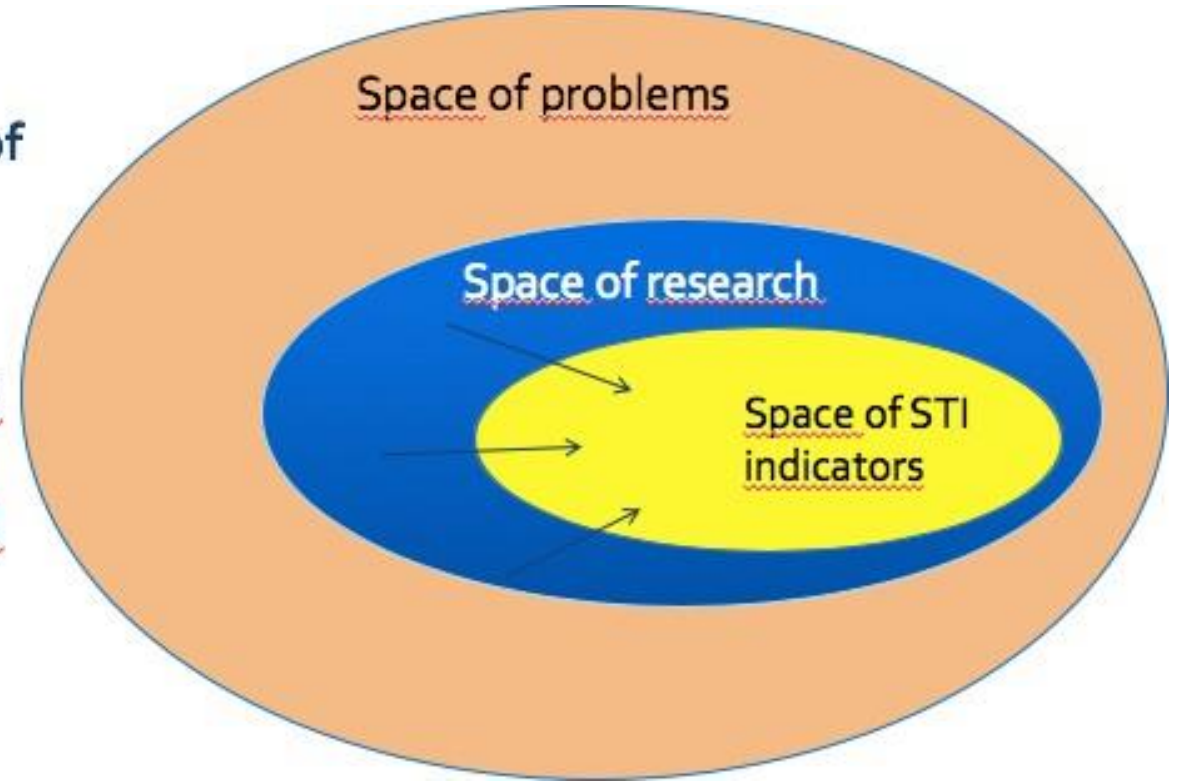
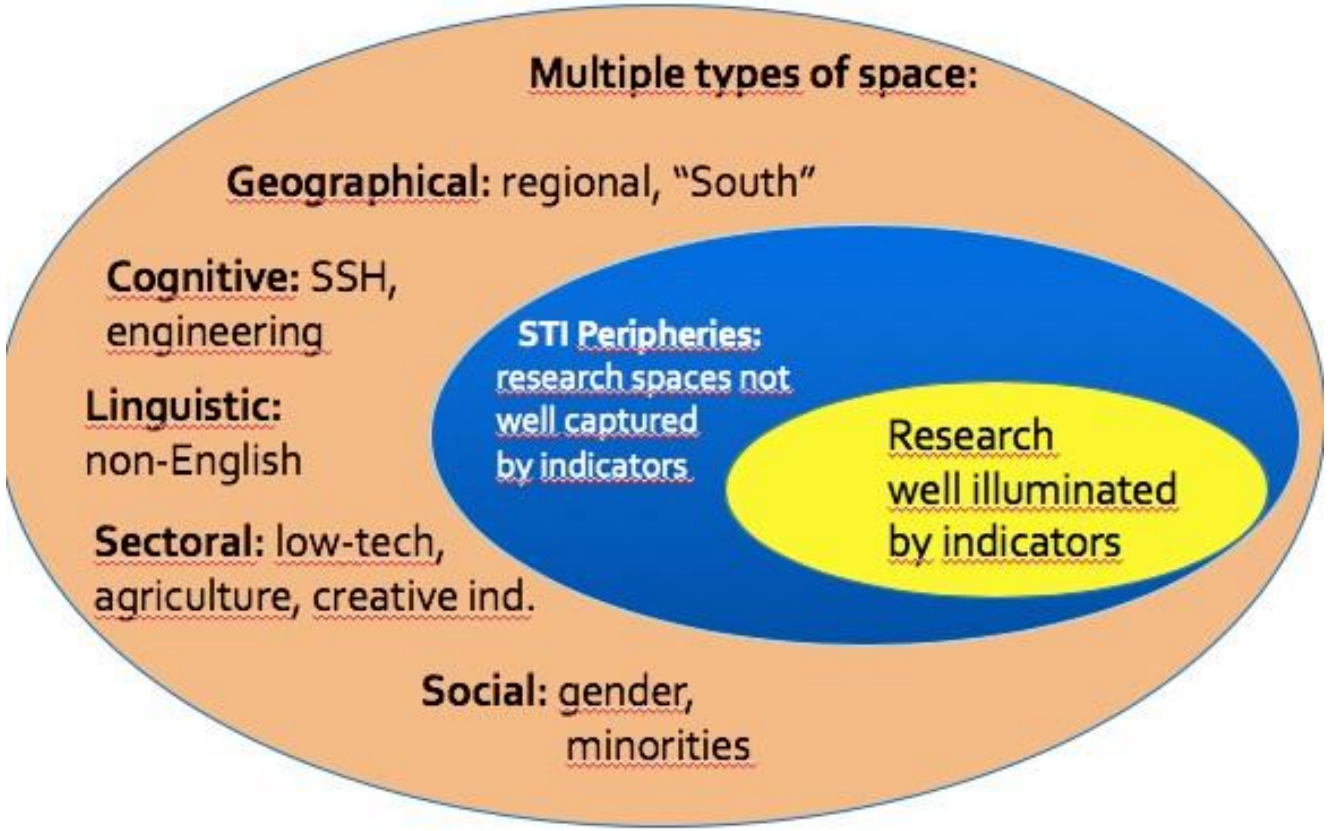
Reduced diversity of research efforts…

…reduced coverage of societal needs



Problems, research, indicators & marginalisation



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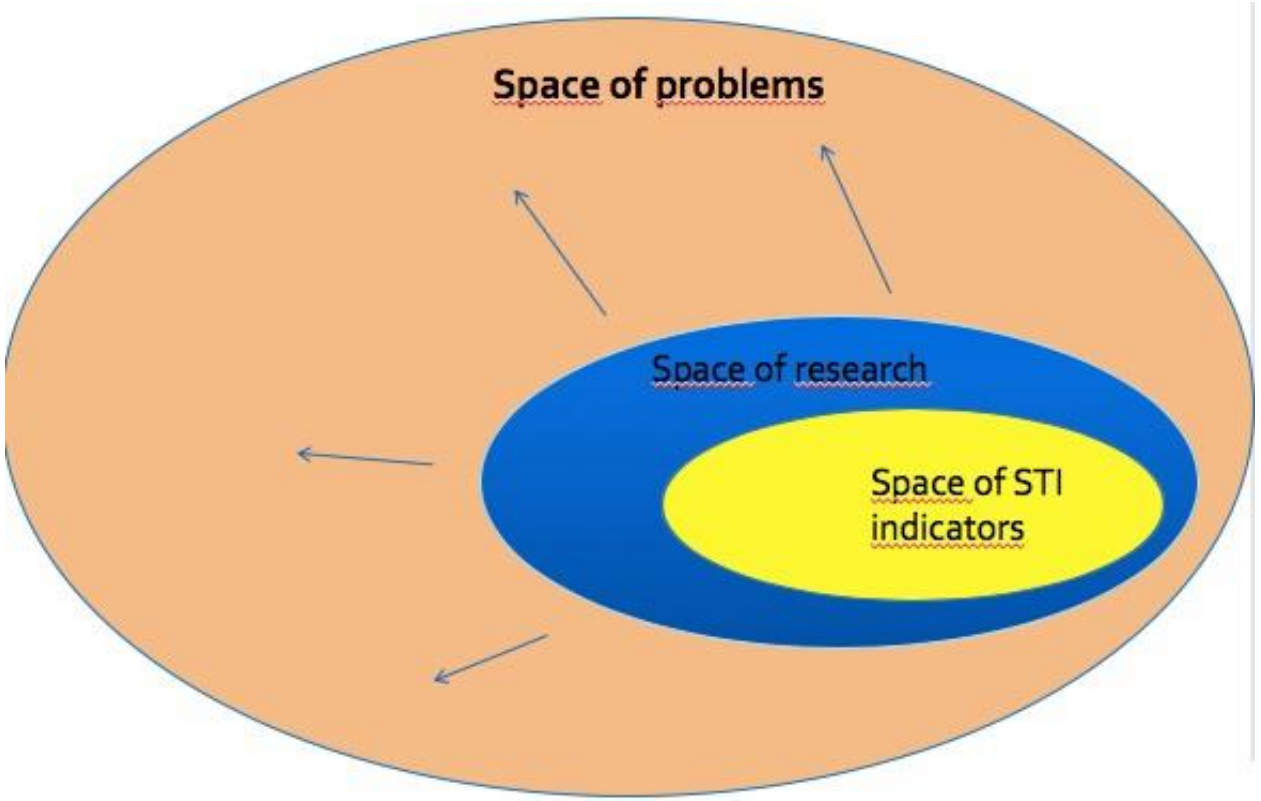
This is the move we should facilitate



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Best practice: broaden out

suite of semi-qualitative indicators

include next-generation metrics

include narrative

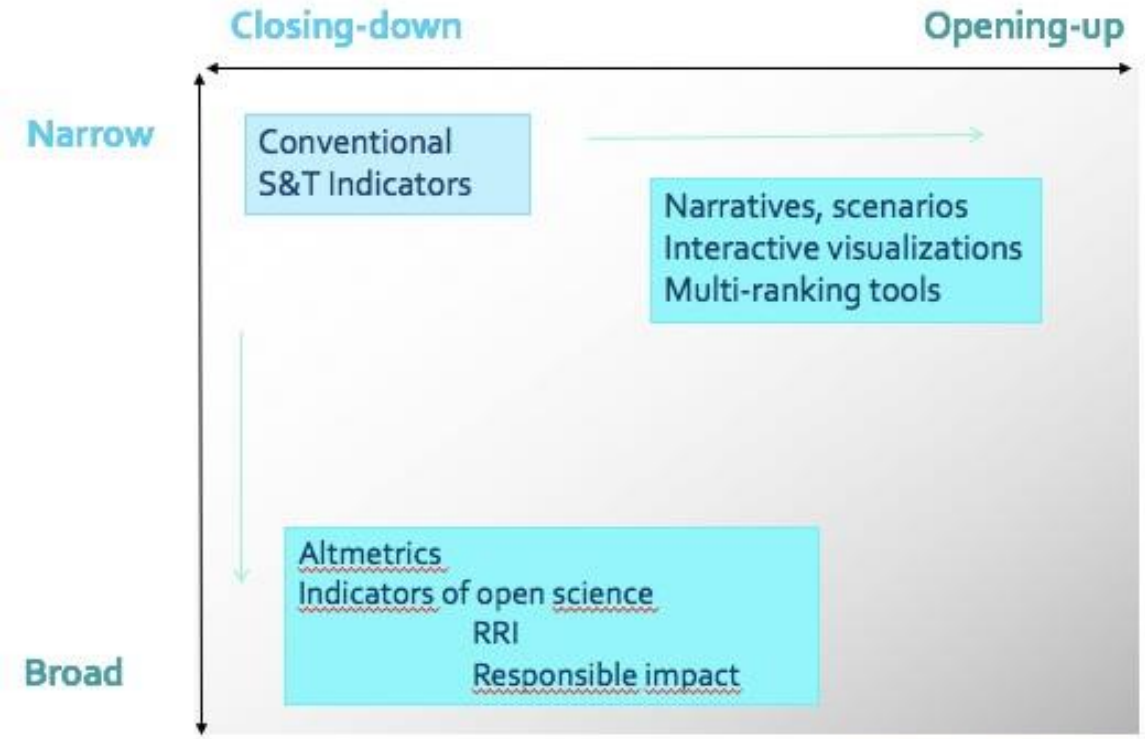
Best practice: open up

responsible: focus on content and quality

watch out for ‘bibliometric creep’

this opens up what can be addressed

Opening up and broadening out



(Leach et al. 2010; Stirling)

Measuring impact SSH

through area-based connectedness

Key assumptions

- Societal impact too diverse and complicated to assess in a ‘traditional’ quantitative way;
- Societal connectedness may be a more useful concept;
- Connectedness is the result of a collaborative effort by a community/ research area

Which one is more important?

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Signals and dimensions

Signal	Dimension
Papers (co-)authored by industry	Industry R&D
Papers published in local languages	Local interest or focus
Papers cited by patents	Technological or commercial interest
Papers mentioned on twitter (or other social media)	Link to general public
Papers mentioned in policy documents	Relating to political issues
Papers mentioned in news	Link to general public
…	

A landscape of science

38.8 million publications from 1999–2018

1.0 billion citation links

Leiden algorithm for clustering publications based on citation links

2890 clusters, each consisting of at least 250 publications

VOSviewer for visualizing the network of citation links between clusters

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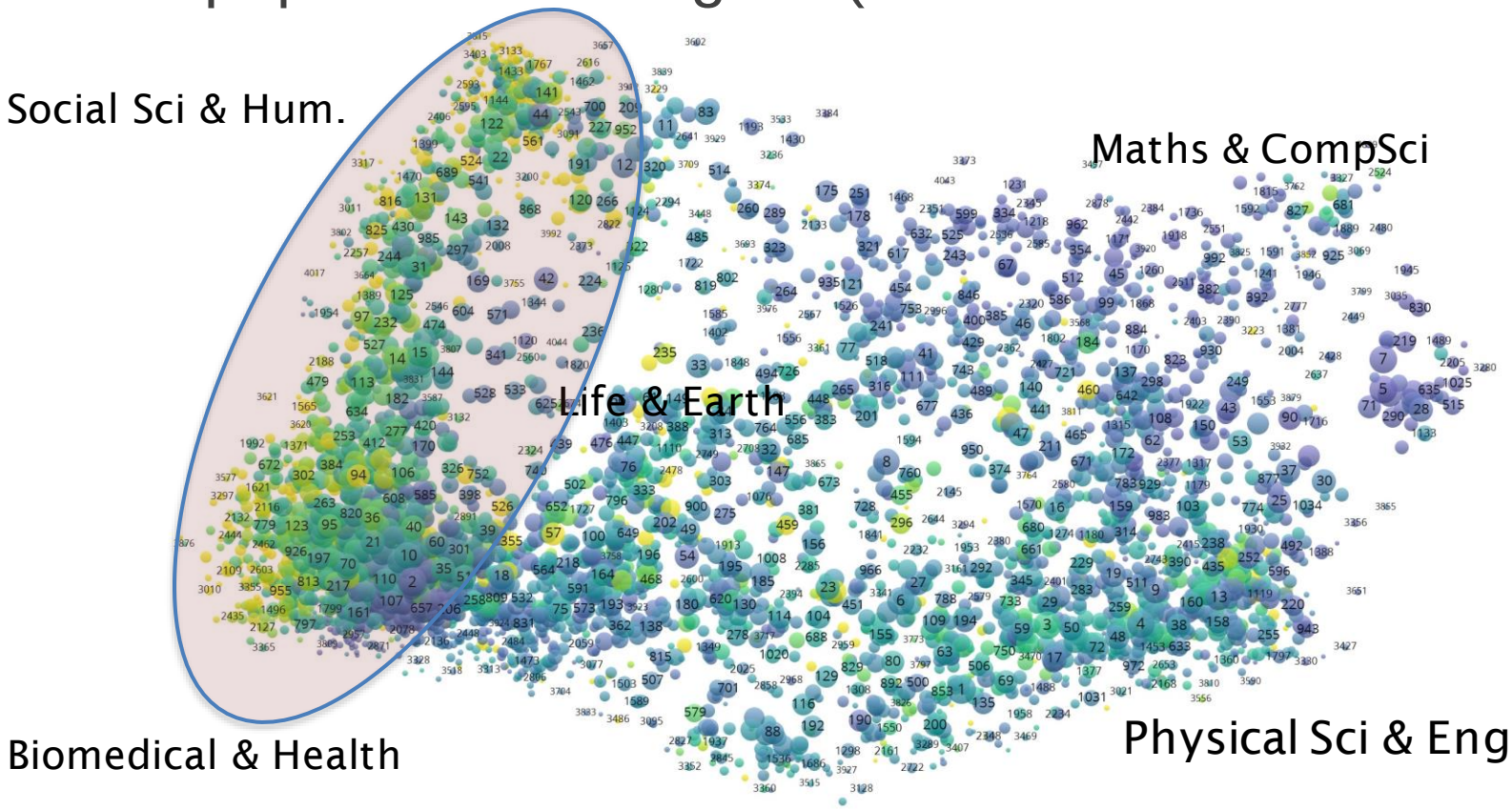
Share of papers not in English (Dimension local interest)



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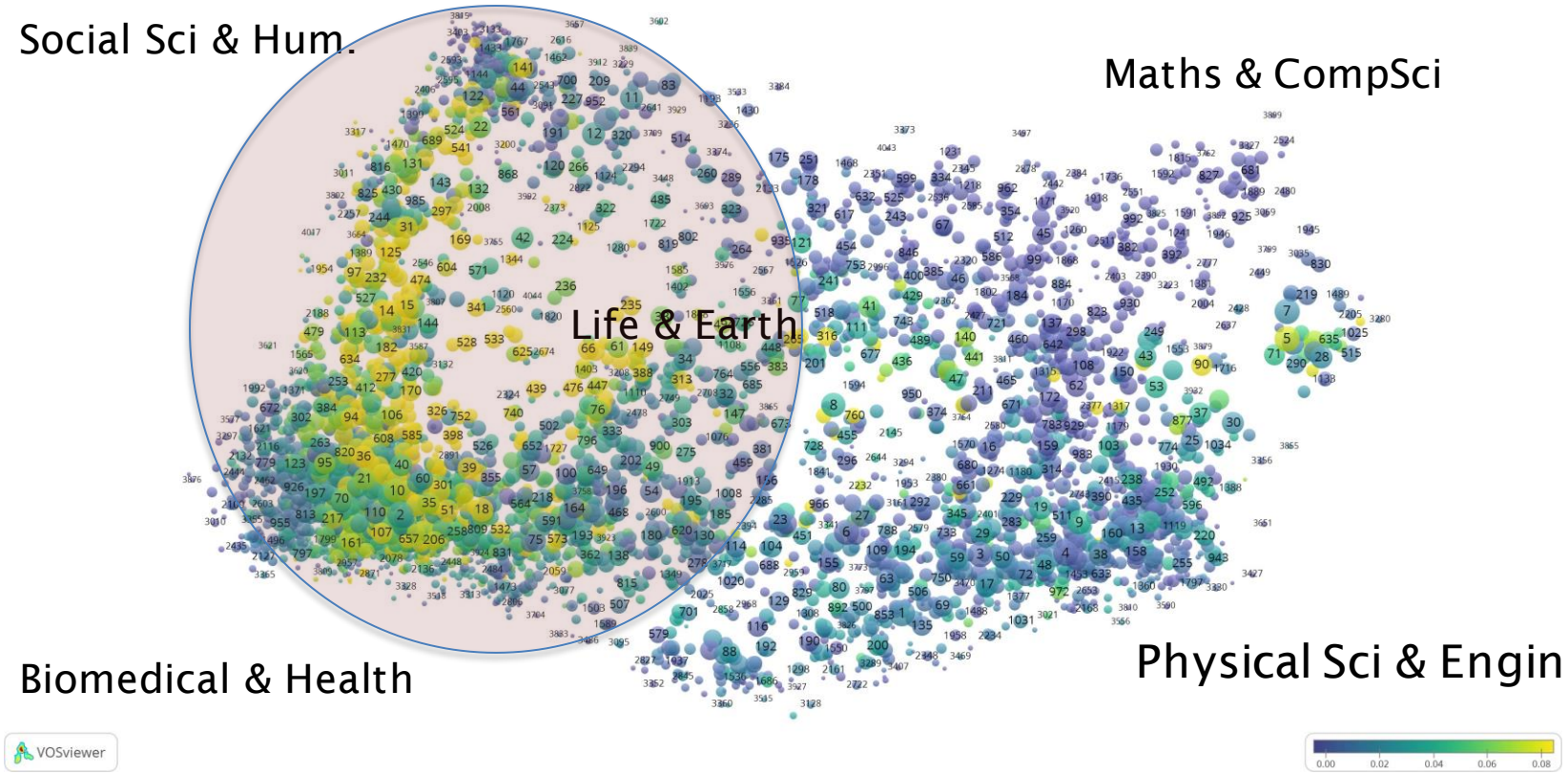
Share of papers mentioned in News (Dimension public debate)



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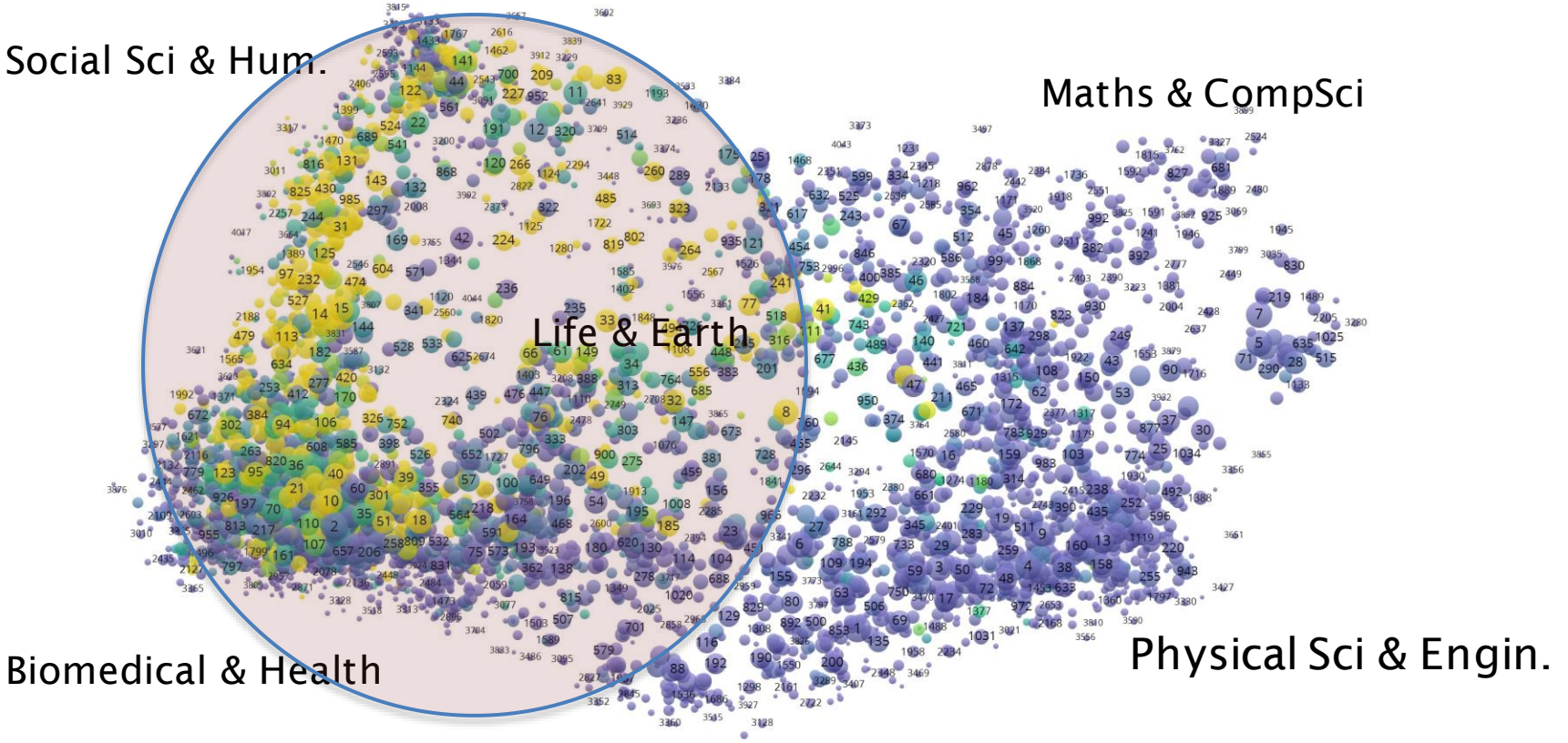
Share papers mentioned in pol. documents (Dimension policy interest)



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A richer variety of evaluation practices

to overcome existing barriers posed by evalua

to incentivize researchers differently

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Focus

not on the forms of output, but on

the processes of knowledgepr & exchange

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Indicators of SSH impact

Norman Bradburn

Senior Fellow of NORC at the University of Chicago and co-PI, Humanities Indicators, the American Academy of Arts & Sciences

Indicators of SSH impact

Eric Moran

Associate Vice President for HSS Journals SAGE

Indicators of SSH Impact

Eric Moran, Associate Vice President, Research

Los Angeles | London | New Delhi | Singapore | Washington DC | Melbourne | Toronto

SAGE Publishing

February Workshop

- Participants represented the Alfred P. Sloan Foundation, Altmetric, the Center for Advanced Study in the Behavioral Sciences at Stanford University, Clarivate Analytics, Google, New York University, SAGE, School Dash, SciTech Strategies, the Social Science Research Council, and the University of Washington

- Report: “The Latest Thinking About Metrics for Research Impact in the Social Sciences”

The full scholarly community must believe that new impact metrics are useful, necessary, and beneficial to society.

Takeaway 1

Los Angeles | London | New Delhi | Singapore | Washington DC | Melbourne | Toronto

SAGE Publishing

A robust new regime of impact measurement must transcend, but not necessarily supplant, current literature-based systems.

Takeaway 2

A new regime of social science impact measures must integrate the experiences and expectations of how nonacademic stakeholders will define impact.

Takeaway 3

Nonacademic Stakeholders

- **Specific communities** involved in (or the subjects of) social science research
- The **general public**
- **Policymakers**
- **Companies that currently provide information** to measure scholarly and traditional outputs
- **Entrepreneurs and entrepreneurial academics** developing new metrics, tools, data sources, and other research infrastructure
- **People working on user interfaces, system design, or service design**

All stakeholders must understand that although social science impact is measurable, social science is not STEM, and social science's impact measurements may echo STEM's but are unlikely to mirror them.

Takeaway 4

Why do we need a specific focus on the social sciences?

- Fewer multi-author publications lead to lower overall citation counts vs STEM
- Impact manifests over longer periods
- Rely more on books and book chapters, which tend to be harder to index in academic search engines than journal citations.
- Many such search engines have poor coverage of social science

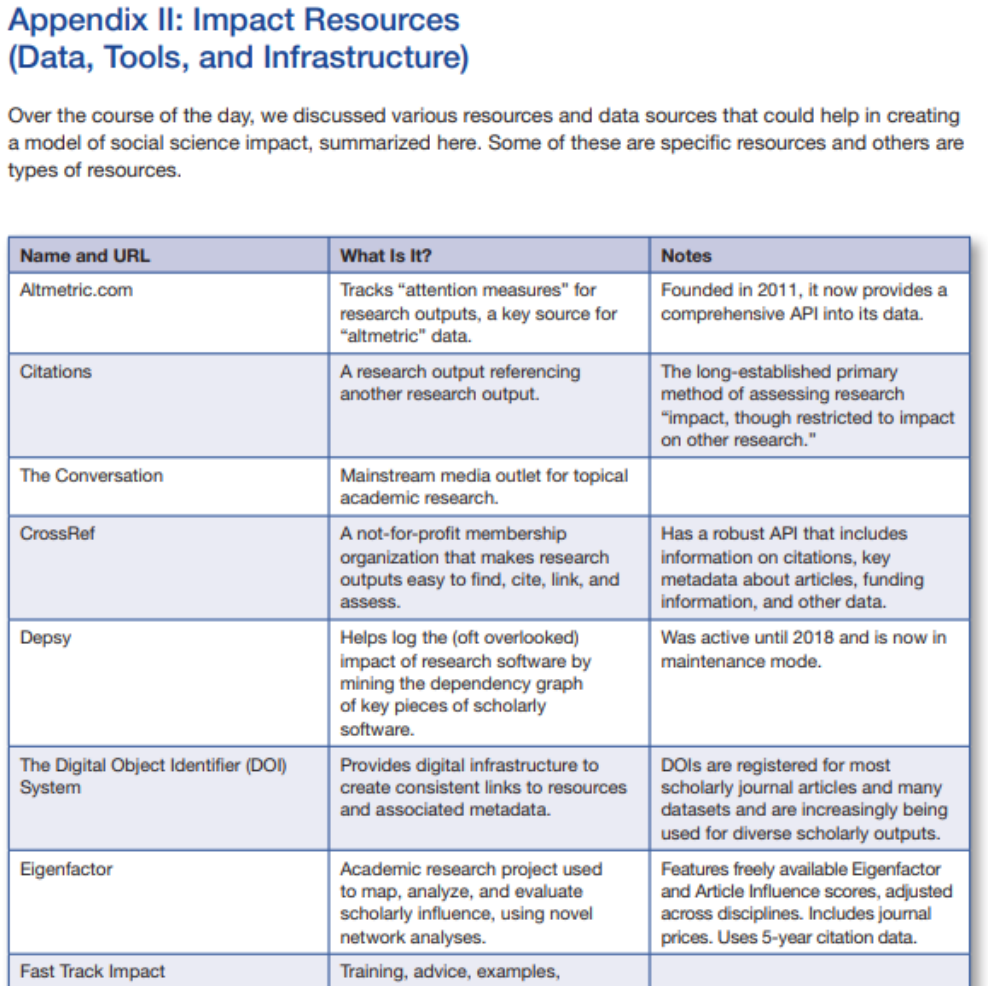
Social science needs a global vocabulary, a global taxonomy, global metadata, and finally a global set of benchmarks for talking about impact measurement.

Takeaway 5

Read the report for more…

- Maps out stakeholder categories
- Defines key terms and questions
- Puts forward four models for assessing impact
- Proposes next steps
- Presents a list of 45 resources and data sources that could help in creating a model of SBS impact

sagepub.com/sageimpactreport



Appendix II: Impact Resources (Data, Tools, and Infrastructure)

Over the course of the day, we discussed various resources and data sources that could help in creating a model of social science impact, summarized here. Some of these are specific resources and others are types of resources.

Name and URL	What Is It?	Notes
Altmetric.com	Tracks "attention measures" for research outputs, a key source for "altmetric" data.	Founded in 2011, it now provides a comprehensive API into its data.
Citations	A research output referencing another research output.	The long-established primary method of assessing research "impact, though restricted to impact on other research."
The Conversation	Mainstream media outlet for topical academic research.	
CrossRef	A not-for-profit membership organization that makes research outputs easy to find, cite, link, and assess.	Has a robust API that includes information on citations, key metadata about articles, funding information, and other data.
Depsy	Helps log the (oft overlooked) impact of research software by mining the dependency graph of key pieces of scholarly software.	Was active until 2018 and is now in maintenance mode.
The Digital Object Identifier (DOI) System	Provides digital infrastructure to create consistent links to resources and associated metadata.	DOIs are registered for most scholarly journal articles and many datasets and are increasingly being used for diverse scholarly outputs.
Eigenfactor	Academic research project used to map, analyze, and evaluate scholarly influence, using novel network analyses.	Features freely available Eigenfactor and Article Influence scores, adjusted across disciplines. Includes journal prices. Uses 5-year citation data.
Fast Track Impact	Training, advice, examples,	

What is SAGE doing?

- Recognizing 5-year instead of 2-year Impact Factors for our HSS Journals
- Launching the 10-year awards
- Creating and supporting initiatives that celebrate social impact of HSS
- Creating opportunities for further debate
  - HSS Conferences
  - SocialScienceSpace.com/impact
  - Impact newsletter

  (sign up: **info@socialsciencespace.com**)

Indicators of SSH impact

Panel discussion and Q&A

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Indicators of SSH impact

Kenneth Prewitt (Chair)

President, American Academy of Political and Social Science

That we closely examine when metrics might introduce as much risk of damage as they introduce helpful indicators

Up Next

3pm	Coffee break	
3.30-5.15pm	Plenary contributions and interactive debate	Rasmuson Theater