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Course for Doctoral Students

**RESEARCH DATA MANAGEMENT AND OPEN DATA**

23th July 2015, Social Science Data Arhives,  
Faculty of Social Sciences, University of Ljubljana

ECPR Summer School 2015

Decorative dandelion seed heads are scattered at the bottom of the slide, including a large one on the left and several smaller ones on the right.

# RESEARCH DATA MANAGEMENT PLANNING

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Laurence Horton, Library, London School of Economics  
and Political Science



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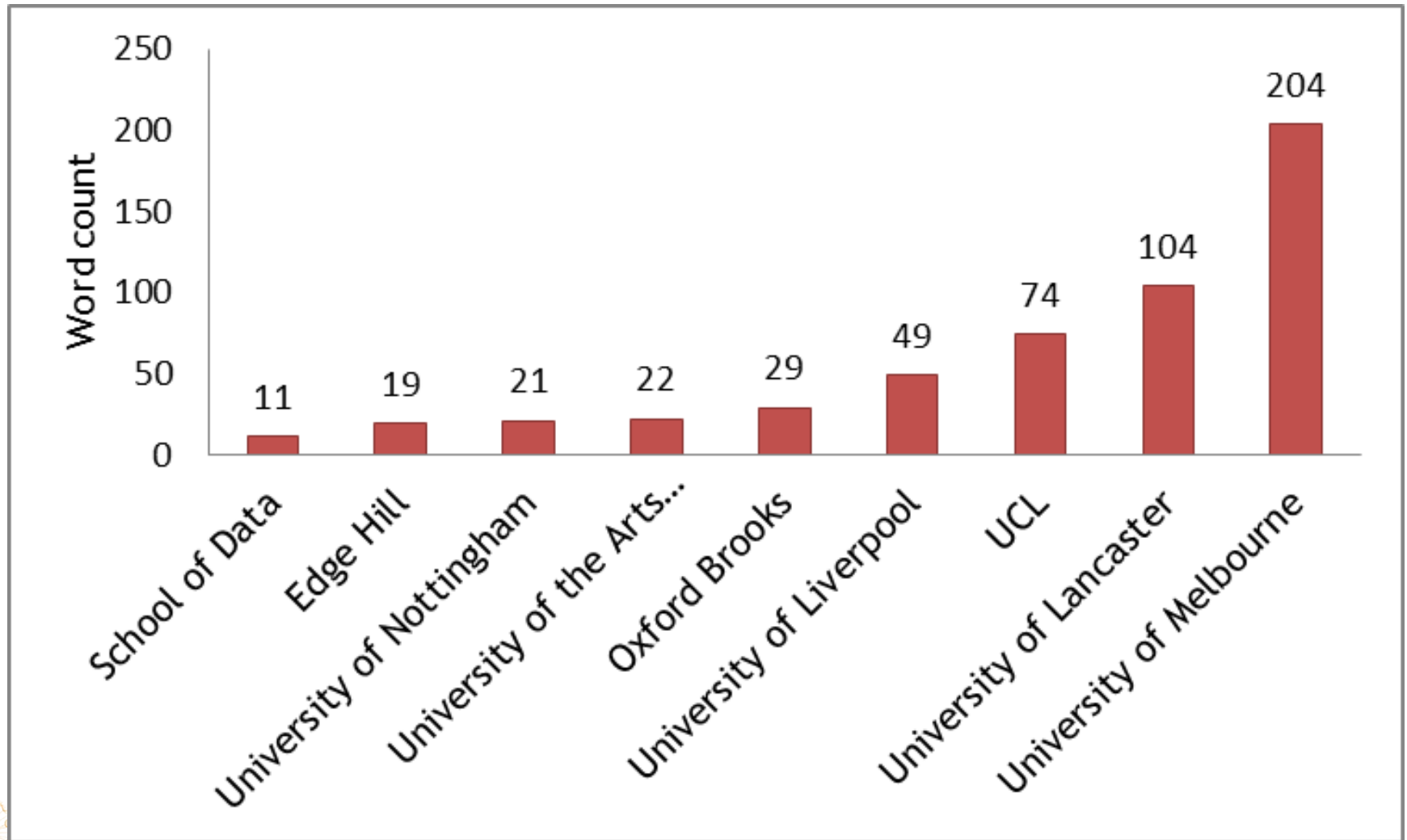
# Research Data Management Planning

1. What does Research Data Management Planning involve?
2. What's the benefit?
3. What do funders expect?
4. What do social science disciplines/journals expect?





# Defining "Data"



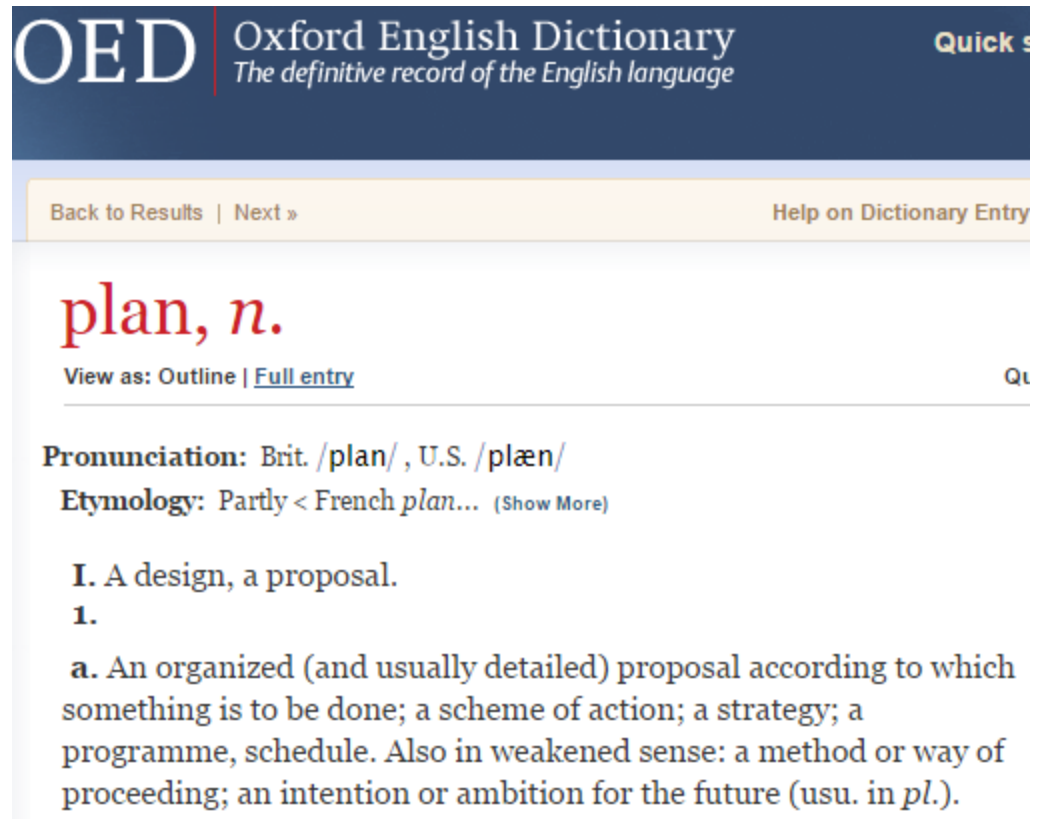
# Responsibility for RDM

- Primarily with the researcher
- But within a wider network of responsibility and support
  - Project based
  - Institution
  - Funder
  - Discipline



# What is a Data Management Plan?

- The basis of effective Research Data Management is planning.



The screenshot shows the Oxford English Dictionary (OED) entry for the noun 'plan'. The header includes the OED logo and the text 'Oxford English Dictionary The definitive record of the English language'. Navigation links for 'Back to Results | Next »' and 'Help on Dictionary Entry' are visible. The entry title is 'plan, n.' with options to 'View as: Outline | Full entry'. The pronunciation is given as 'Brit. /plan/, U.S. /plæn/'. The etymology is 'Partly < French *plan*...' with a 'Show More' link. The definition is structured as follows:

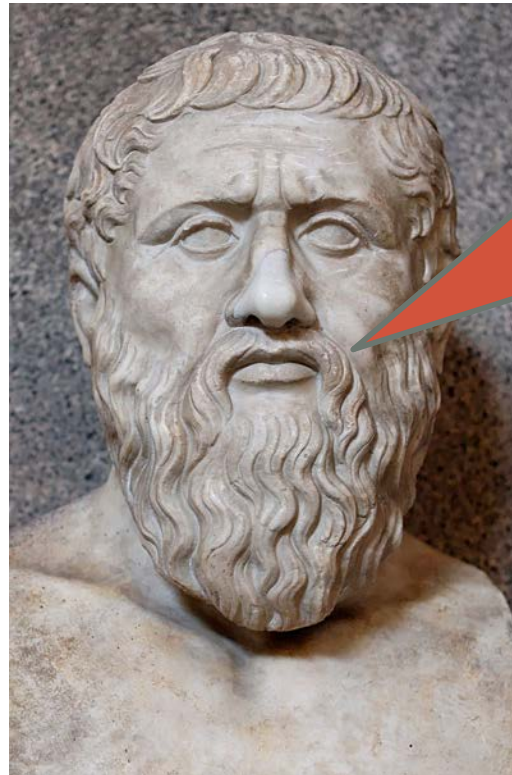
**I.** A design, a proposal.

**1.**

**a.** An organized (and usually detailed) proposal according to which something is to be done; a scheme of action; a strategy; a programme, schedule. Also in weakened sense: a method or way of proceeding; an intention or ambition for the future (usu. in *pl.*).

# Data Management Plan content: Consent

- Obtaining informed consent from research participants, and in a way that doesn't unnecessarily prevent data re-use



~~"I should assume  
that your silence  
gives consent"~~



# Data Management Plan content: Ethics

- resolving the tension between protecting participants and being able to do research



# Data Management Plan content: Anonymisation

- strategies that allow us to extract value from the data while protecting, where necessary, the identity of participants



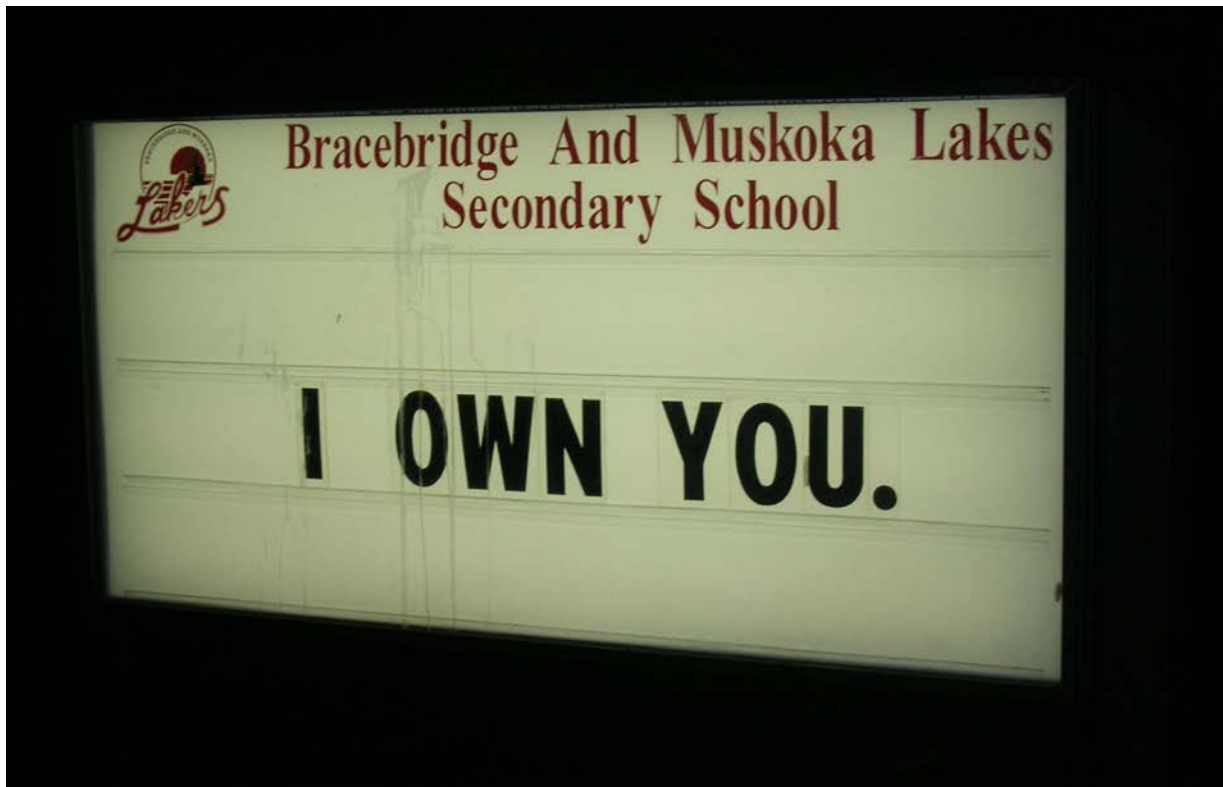
# Data Management Plan content: Documentation/Metadata

- making data discoverable and comprehensible to others
  - and if you collected the data, your future self

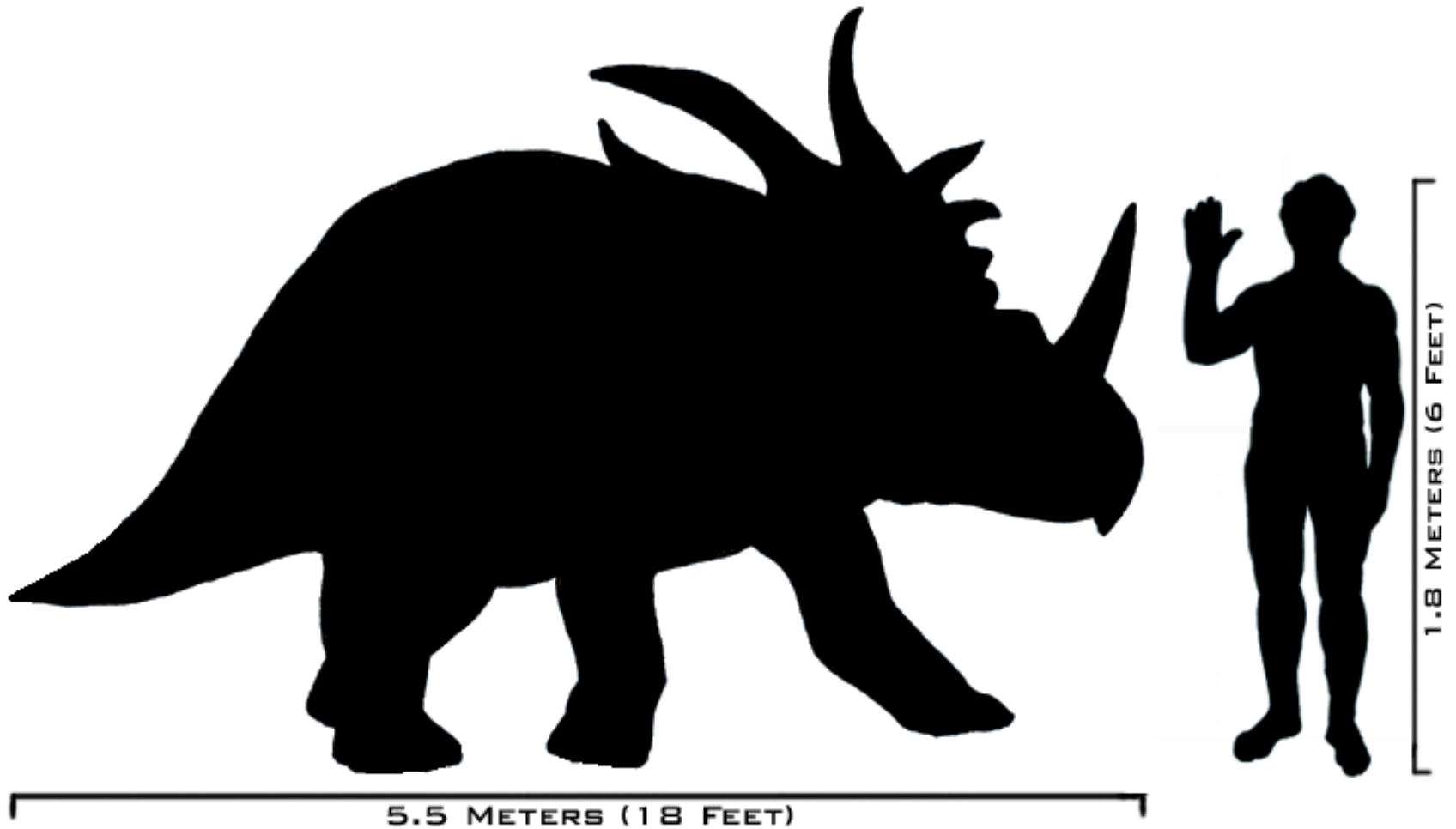
**METADATA IS A  
LOVE NOTE  
TO THE FUTURE**

# Data Management Plan content: Intellectual Property

- clarifying ownership of data and conditions under which data can be used or re-used.



# Data Management Plan content: Size and format



# Data Management Plan content: Storage

- protecting data from accidental or malicious damage or loss



# Data Management Plan content: Long-term preservation and re-use

- planning for long-term preservation.
  - where will the data go?
  - under what conditions can it be re-used.





# What's the benefit of Research Data Management Planning?





# Benefits of Data Management Plans

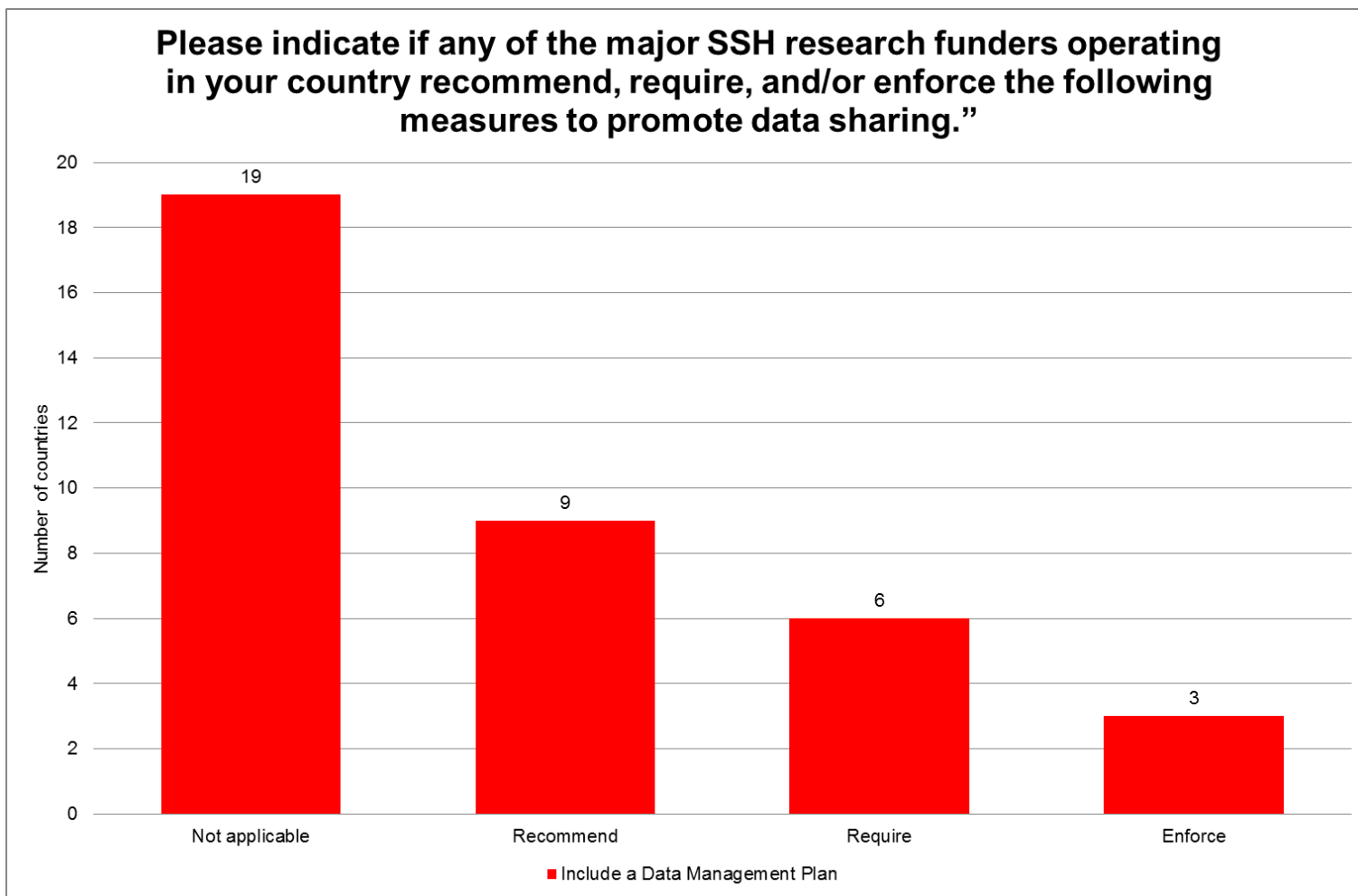
- Route map to research
- Focus resources
- Allocate roles and responsibilities
- Clarify data sharing requirements
- Identify potential data sharing problems



# What do funders expect in Research Data Management Planning?



# IFDO survey of social science/humanities funders



Source: Vigdis Kvalheim, Trond Kvamme (2014) Policies for Sharing Research Data in Social Sciences and Humanities: A survey about research funders' data policies  
[http://www.dcc.ac.uk/sites/default/files/documents/reports/ifdo\\_survey\\_report.pdf](http://www.dcc.ac.uk/sites/default/files/documents/reports/ifdo_survey_report.pdf)

# IFDO survey: funder actions on Data Management Plans

Enforce

Luxembourg,  
UK, USA

Recommend

Australia,  
Canada, Finland,  
Germany, Italy,  
Namibia,  
Netherlands,  
USA, Sierra  
Leone.

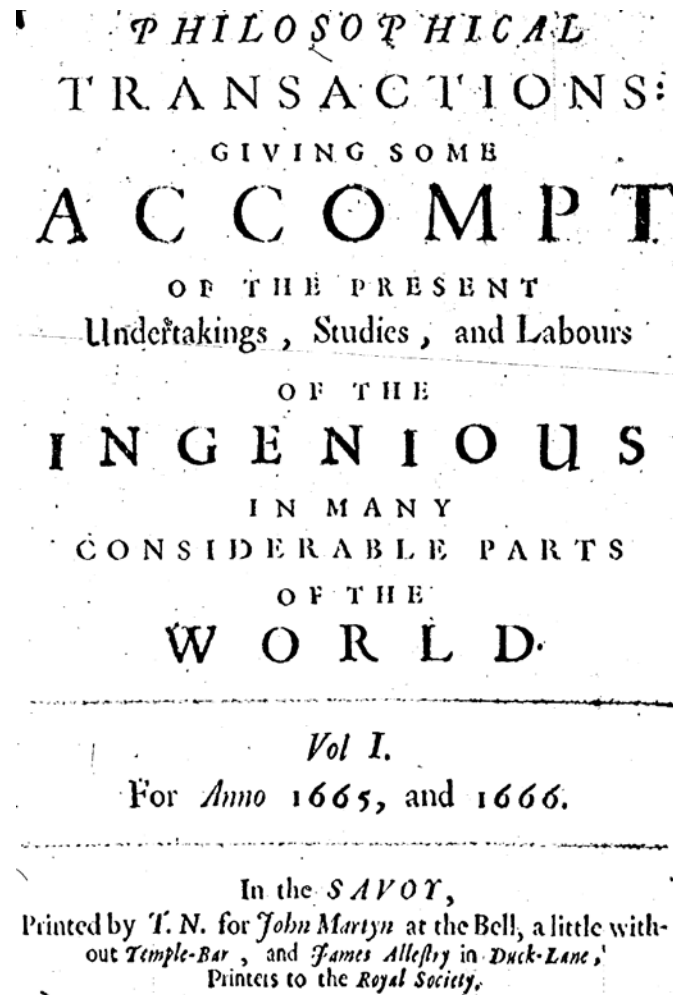
Require

Finland,  
Germany, India,  
Italy, Sweden,  
USA

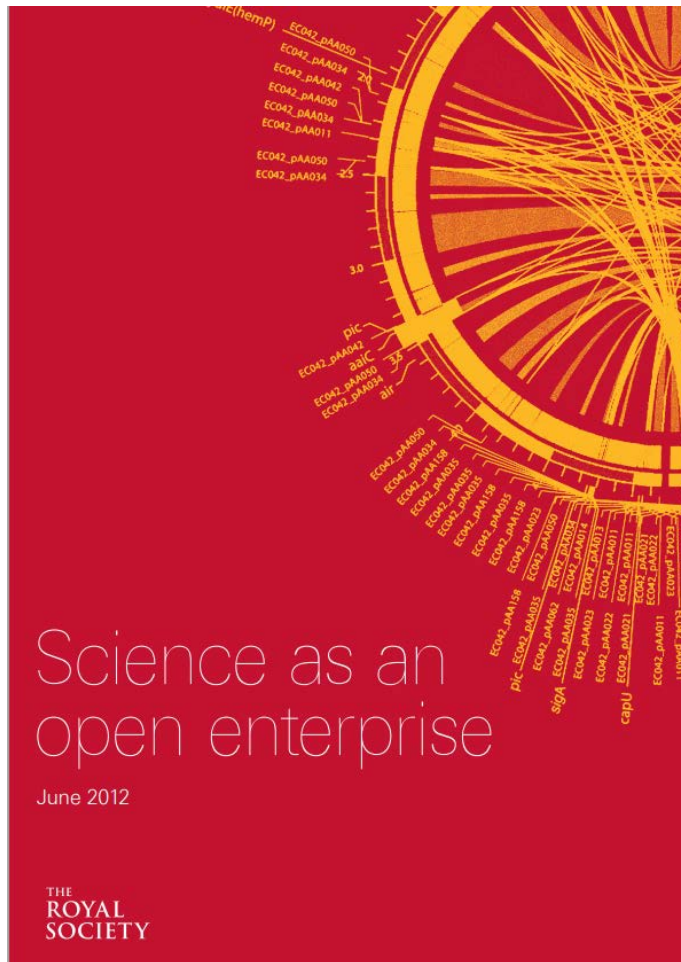
Not applicable

China, Czech  
Republic, Denmark,  
Estonia, Hungary,  
India, Japan, Latvia,  
New Zealand,  
Norway, Philippines,  
Romania, Russia,  
Slovak Republic,  
Slovenia, Spain,  
Switzerland, Taiwan,  
Uruguay

# What do social science disciplines/journals expect in Research Data Management Planning?



# Data requirements: Journals and disciplines



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## Recommendation 6

**As a condition of publication, scientific journals should enforce a requirement that the data on which the argument of the article depends should be accessible, assessable, usable and traceable through information in the article. This should be in line with the practical limits for that field of research. The article should indicate when and under what conditions the data will be available for others to access.**

Effective exchange of ideas, expertise and people between the public and private sectors is key to delivering value from research. The economic benefit and public interest in research should influence how and when data, information and knowledge from publicly or privately funded research are made widely available.

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# Disciplines: Economics

## ***The American Economic Review: Data Availability Policy***

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It is the policy of the *American Economic Review* to publish papers only if the data used in the analysis are clearly and precisely documented and are readily available to any researcher for purposes of replication. Authors of accepted papers that contain empirical work, simulations, or experimental work must provide to the *Review*, prior to publication, the data, programs, and other details of the computations sufficient to permit replication. These will be posted on the *AER* Web site. The Editor should be notified at the time of submission if the data used in a paper are proprietary or if, for some other reason, the requirements above cannot be met.

<https://www.aeaweb.org/aer/data.php>





# Disciplines: Psychology

## Data Sharing: Principles and Considerations for Policy Development

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Data Sharing Working Group\*

American Psychological Association

June 2015

The American Psychological Association's Board of Scientific Affairs (BSA) convened a working group in 2014-15 to explore the ethical and practical issues involved in sharing research data. In addition to members of BSA, the working group included representatives from other APA governance bodies: the Committee on Animal Research and Ethics, the Committee on Human Research, and the Publications and Communications Board.

6. It is the responsibility of the principal investigator to ensure that data are prepared in a form that is usable and interpretable by others (including provision of sufficient background information and annotations) and to deposit the data and accompanying material in a repository in accord with applicable data sharing policies. The secondary data user is responsible for protecting the identities and confidentiality of participants, conducting analyses consistent with best methodological practices, making informed and responsible interpretations of the data, and consulting with the principal investigator or original research team as needed to ensure that the user has proper understanding of the data.

<https://apa.org/science/leadership/bsa/data-sharing-report.aspx>





# Disciplines: Sociology

## American Sociological Association Code of Ethics

### *13.05 Data Sharing*

- (a) Sociologists share data and pertinent documentation as a regular practice. Sociologists make their data available after completion of the project or its major publications, except where proprietary agreements with employers, contractors, or clients preclude such accessibility or when it is impossible to share data and protect the confidentiality of the data or the anonymity of research participants (e.g., raw field notes or detailed information from ethnographic interviews).
- (b) Sociologists anticipate data sharing as an integral part of a research plan whenever data sharing is feasible.
- (c) Sociologists share data in a form that is consonant with research participants' interests and protect the confidentiality of the information they have been given. They maintain the confidentiality of data, whether legally required or not; remove personal identifiers before data are shared; and, if necessary, use other disclosure avoidance techniques.
- (d) Sociologists who do not otherwise place data in public archives keep data available and retain documentation relating to the research for a reasonable period of time after publication or dissemination of results.
- (e) Sociologists may ask persons who request their data for further analysis to bear the associated incremental costs, if necessary.
- (f) Sociologists who use data from others for further analyses explicitly acknowledge the contribution of the initial researchers.

<http://www.asanet.org/images/asa/docs/pdf/CodeofEthics.pdf>



# Disciplines: Political Science

## **Data Access and Research Transparency (DA-RT): A Joint Statement by Political Science Journal Editors**

From the “Workshop on Data Access and Research Transparency (DA-RT) in Political Science.” Convened by the American Political Science Association (APSA) and hosted by the Inter-university Consortium for Political and Social Research (ICPSR), with support from Syracuse University’s Center for Qualitative and Multi-Method Inquiry (CQMI), and the University of Michigan’s Center for Political Studies (CPS).

September 18-19, 2014, Ann Arbor, MI

October 6, 2014

*In this joint statement, journal editors commit their respective journals to the principles of data access and research transparency, and to implementing policies requiring authors to make as accessible as possible the empirical foundation and logic of inquiry of evidence-based research.*

[http://media.wix.com/ugd/fa8393\\_da017d3fed824cf587932534c860ea25.pdf](http://media.wix.com/ugd/fa8393_da017d3fed824cf587932534c860ea25.pdf)



# Data Access and Research Transparency (DART) signatories (Oct 2014 - )

American Political Science Review	Journal of Peace Research
American Journal of Political Science	European Union Politics
Journal of Conflict Resolution	International Interactions
Comparative Political Studies	British Journal of Political Science
Political Analysis	Security Studies
Research and Politics	Journal of Politics
State Politics and Policy Quarterly	European Political Science
Political Science Research and Methods	Party Politics
Quarterly Journal of Political Science	Conflict Management and Peace Science
Political Behavior	Cooperation and Conflict
International Security	European Journal of Political Research
The Political Methodologist	Journal of European Public Policy
Italian Political Science Review	

<http://www.dartstatement.org/>

# Data Access and Research Transparency in the Quantitative Tradition

Arthur Lupia, *University of Michigan*

George Alter, *University of Michigan*

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planning and good data management practices can reduce burdens often associated with data sharing.

Many universities employ “data librarians” who offer assistance with data management planning.

Data archives, including the six partners in the Data Preservation Alliance for the Social Sciences (<http://www.data-pass.org/>), are also available to offer advice and assistance to a wide range of scholars

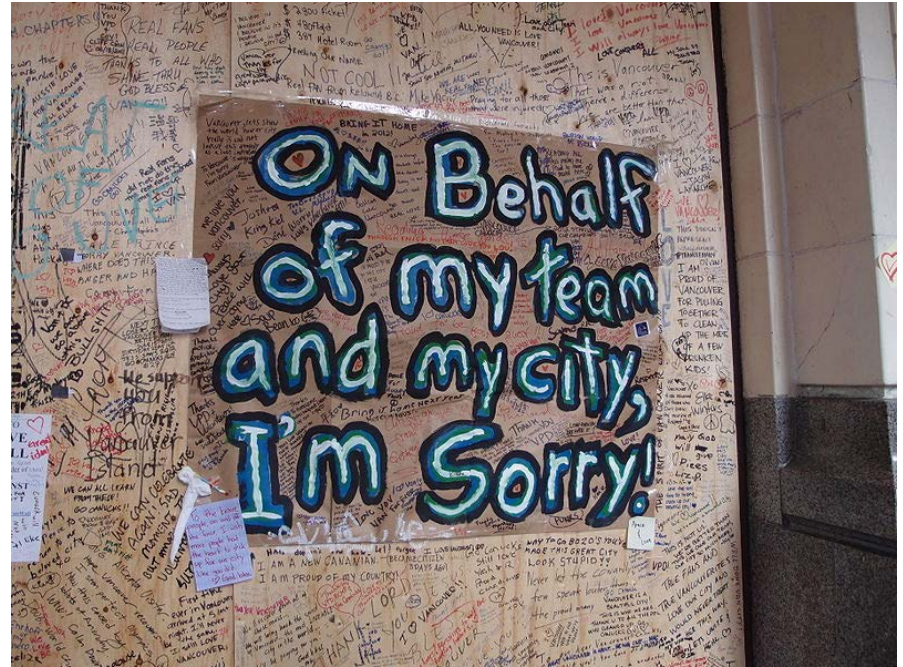
Arthur Lupia, George Alter (2014) “Data Access and Research Transparency in the Quantitative Tradition” *PS: Political Science & Politics* 47(1) p.56

<http://dx.doi.org/10.1017/S1049096513001728>



# Research Data Management Planning: Conclusions

- Data Management Plans map a way through research
- Funders are moving towards Data Management Plans as part of funding applications
- Journals require data sharing as a condition of publication.
- It is always better to seek permission rather than forgiveness



A Data Management Plan can help



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