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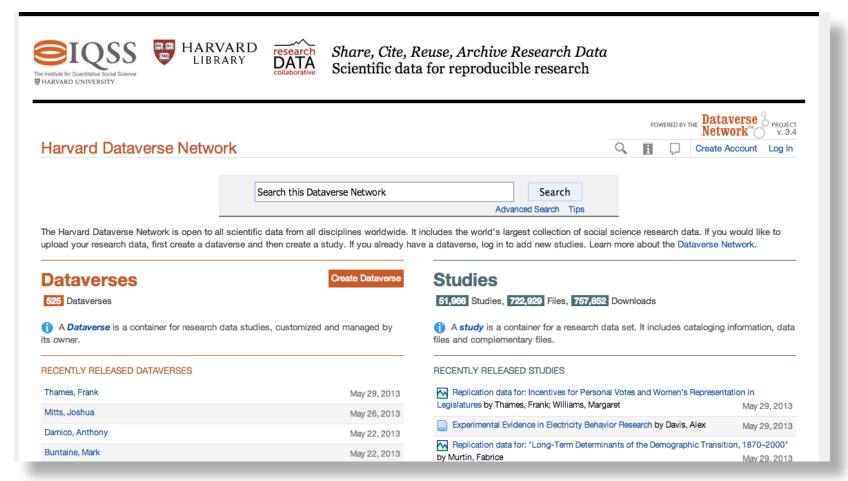
Director of Data Science, IQSS

Harvard University



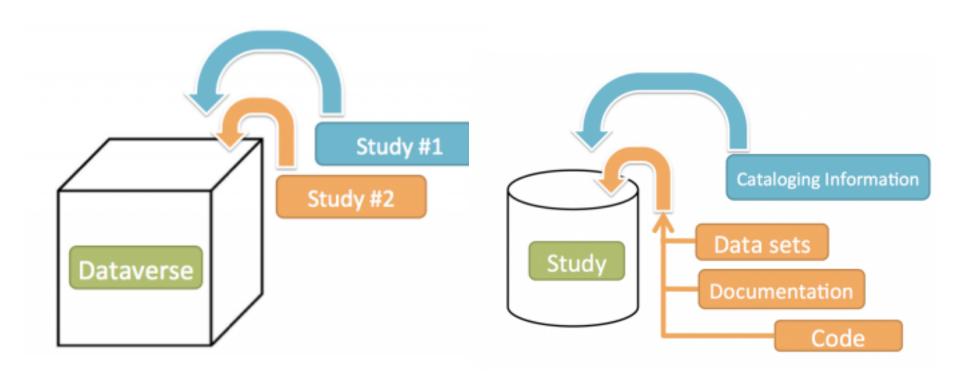


http://thedata.harvard.edu

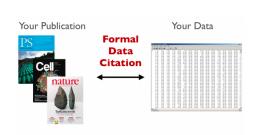


- The Harvard Dataverse Network is open to all research data from all domains (not exclusive to Harvard).
- The Dataverse Network software is open-source (in GitHub), installed in institutions across the world (http://thedata.org).

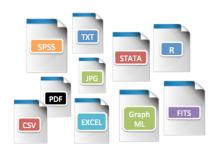
Dataverse: Container for your research studies Study: Container for your data, documentation, and code



Data sharing and archiving with control and recognition for data authors, distributors



Persistent Data Citations permanently linking your data to Your publication



Support for all file types any format, max 2 GB per file



Customized Branding or embed on your site



Data Restrictions & terms of use options

Rich data support for some data formats



SPSS, Stata, R Data metadata extraction, subsetting & analysis (R, Zelig)

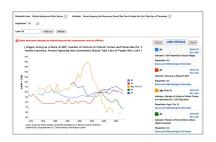


Social Network Data (GraphML)

smart queries & subsetting

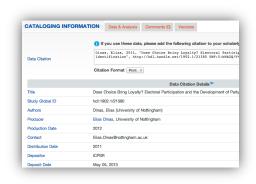


FITS Data
metadata extraction from file
header



Data visualizations for time series

Data management, standards and archival good practices



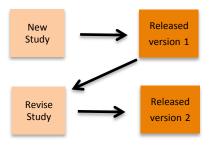
Data Cataloging

custom metadata templates for easy discovery (DDI, Dublin Core)



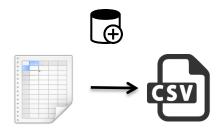
Log traffic & downloads

to your dataset with Guestbook



Data Versioning

preserve & cite previous versions



Permanent storage

preservation format with w/copies in multiple locations (OAI-PMH, LOCKSS)

Enabling Replication of published work

REPLICATION DATA FOR: WHAT TO DO ABOUT MISSING DATA IN TIME-SERIES CROSS-SECTIONAL DATA

< View Previous Study Listing

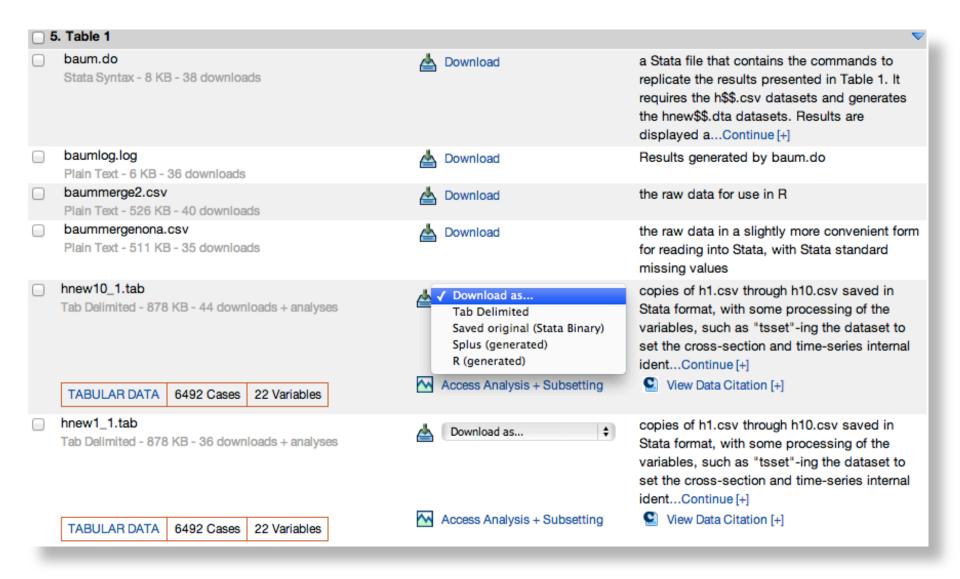
hdl:1902.1/14316UNF:5:RzZmkys+laJKkDMAeQBObQ== Version: 3 – Released: Mon Mar 14 16:45:20 EDT 2011

CATALOGING INFORI	MATION Data & Analysis Comments (0) Versions					
f If you use these data, please add the following citation to your scholarly references. Why cite?						
Data Citation	James Honaker; Gary King, 2010, "Replication data for: What To Do about Missing Data in Time-Series Cross-Sectional Data", http://hdl.handle.net/1902.1/14316 UNF:5:RzZmkys+IaJKkDMAeQBObQ== IQSS Dataverse Network [Distributor] V3 [Version]					
	Citation Format Print Print					
	1 Results found in this publication can be replicated using these data.					
Original Publication James Honaker and Gary King. 2010. "What To Do about Missing Data in Time-Series Cross-Sectional American Journal of Political Science 54 (2): 561-81. article available here						
Data Citation Details ▼						
Title	Replication data for: What To Do about Missing Data in Time-Series Cross-Sectional Data					
Study Global ID	hdl:1902.1/14316					
Authors	ors James Honaker (The Pennsylvania State University); Gary King (Harvard University)					
Production Date	2010					

Documentation, code and data

1 .	☐ 1. Documentation						
	Honaker&King.pdf Adobe PDF - 1 MB - 68 downloads	₾	Download	Published article			
	Readme.txt Plain Text - 984 bytes - 62 downloads	₾	Download	Detailed information on the files in this study			
2	☐ 2. Figure 6						
	F6 - aaReadme.txt Plain Text - 1 KB - 47 downloads		Download	The files in this folder replicate the results presented in figure 6 comparing the coefficients of first differences of changes in trade dependence on the level of violence, from Burgoon (2006)			
	F6 - analyzeburg.r Plain Text - 13 KB - 44 downloads		Download	replicates the original Burgoon results, and then reruns these models with the imputed data. All quantities of interest can be found here. The code also creates the comparison of the Continue [+]			
	F6 - burgoonsubset.RData R Data - 338 KB - 43 downloads	₾	Download	raw data in an R readable format			
	F6 - impburg.r Plain Text - 298 bytes - 43 downloads	₾	Download	reads in the data and runs the imputation in Amelia. Running this code will create one hundred imputed datasets named "p3ny\$\$.csv". Those used to create the graph in the paper are inContinue [+]			
	figure6.zipx application/octet-stream - 1 MB - 40 downloads	₾	Download	imputed datasets named "p3ny\$\$.csv"			
☐ 3. Figure7a							
	F7a-aaReadme.txt Plain Text - 844 bytes - 37 downloads	₾	Download	The files in this folder replicate the first (uppermost) row of graphs in figure 7			
	F7a - impburg.r Plain Text - 298 bytes - 38 downloads	₾	Download	reads in the data and runs the imputation in Amelia. Running this code will create one hundred imputed datasets named			

Multiple formats, subsets and data analysis (Zelig)





Current projects (I)

- Integrate PKP's Open Journal System(OJS) with Dataverse:
 - Build a Plugin to submit data from OJS seamlessly to Dataverse
 - Establish persistent link between publication and data
 - Work with publishing workflows (data as part of submissions; data review and approval)
 - Pilot phase: 6 publishers, ~ 80 journals (total Journals using OJS: ~ 5,000)

http://projects.iq.harvard.edu/ojs-dvn/

Current projects (II)



- Extend data sharing to sensitive data:
 - Define (5) Privacy Tags to assess privacy risk and terms of use of a data set
 - Support secure transfer, storage and authentication for sensitive data
 - Integrate with privacy methods to access and analyze data

http://privacytools.seas.harvard.edu/

Current projects (III)



- Generate socio-metrics for data:
 - Connect data through metadata
 - Connect data through data usage
 - Connect data through methods

http://databridge.web.unc.edu/



OPEN SCIENCE FOR BIG DATA

Find, Share, Cite, Reuse, Reproduce Research

NOW

Large # of small data sets

COMING SOON Small # of very large data sets



Persistent data citation: open access; multiple formats











Citation of a subset Provenance Real-time Explore Combine Data Crowdsourcing

Downloadable, fixed-size data files (KB – GB)

Data

Metadata



Largest collection of social science data (>700,000 files); astronomy data

Frequently Updated

FOREVER DATA

Big Data (TB - EB)

Real-time Streaming



Privacy Sensitive



Examples:



Connectome



Pan-STARRS



Health

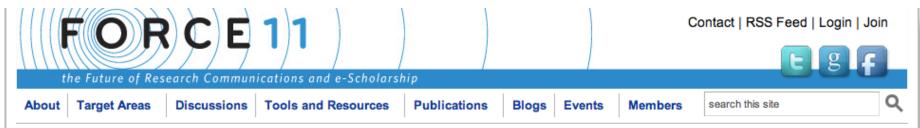


Education



Social Media

Formal Data (and Code) Citation in Published Work



Publications >

Amsterdam Manifesto

Endorse

Comment

The Amsterdam Manifesto on Data Citation Principles

Preface:

We wish to promote best practices in data citation to facilitate access to data sets and to enable attribution and reward for those who publish data. Through formal data citation, the contributions to science by those that share their data will be recognized and potentially rewarded. To that end, we propose that:

- Data should be considered citable products of research.
- 2. Such data should be held in persistent public repositories.
- 3. If a publication is based on data not included with the article, those data should be cited in the publication.
- 4. A data citation in a publication should resemble a bibliographic citation and be located in the publication's reference list.
- 5. Such a data citation should include a unique persistent identifier (a DataCite DOI recommended, or other persistent identifiers already in use within the community).
- 6. The identifier should resolve to a page that either provides direct access to the data or information concerning its accessibility. Ideally, that landing page should be machine-actionable to promote interoperability of the data.
- 7. If the data are available in different versions, the identifier should provide a method to access the previous or related versions.
- 8. Data citation should facilitate attribution of credit to all contributors