
Importance of data management

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*Creating a Research Project Data
Management Plan Workshop*

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Introduction

- if data are properly managed, they will be:
 - more accessible to other researchers
 - research & knowledge base develops more rapidly
 - more likely to be re-visited and re-used in ways that may be different from their original intention
 - available to assist in the development of genuinely multidisciplinary approaches to an issue & the development of combined/multi-method/across-time data sets
 - more likely to be preserved – important for unique and historically significant data
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Introduction

- greater access to research data will lead to:
 - better science
 - driven by the capacity for:
 - data linkage, sharing, analysis, aggregation & transformation
 - more sophisticated cross-disciplinary and cross-method research
 - *scientific method changes from: “hypothesize, design and run experiment, analyze results” to “hypothesise, look up answer in data base”* (Microsoft Towards 2020 Science, PMSEIC Report on Data for Science)
 - enhanced returns from publicly-funded research
 - benefits afforded by the capacity for national and global sharing & linkage of data
 - greater likelihood that solutions will be found to complex societal problems
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Introduction

- need:
 - well-managed data repositories that allow for data archiving, data linkage
 - clear data management plans
 - mechanisms to facilitate appropriate access to the data through sophisticated cataloguing & access facilities
 - protocols to respond to the legal, regulatory, ethical and privacy issues that arise in relation to data linking and sharing
 - strategies to: *“change the national culture to ensure data are valued, kept, discovered, described, archived adequately, protected, shared and used again and again”*
(PMSEIC Report on Data for Science)
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Humphrey (2001, 2005)

- survey of researchers who had received a research grant from the SSHRC between 1998 & 2000
 - 7% had deposited their data; further 18% intended to
 - almost all of these researchers named a source that wasn't an archive
 - at least half of the researchers did not view data archiving as part of the normal practices of conducting research.
 - *“archiving data .. an unknown activity in conducting research”*
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Australian Social Science Data Archive



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Welcome to the Australian Social Science Data Archive

Access the website via the navigation panel on your left.

DEPOSITING DATA

LINKS

General Enquiries: assda@anu.edu.au
Web Enquiries: webmaster@assda.anu.edu.au

MY ACCOUNT

Last Updated: 20/02/06

*UQ Social Research
Centre in the
Institute
for Social Science
Research*



Australian Social Science Data Archive

- established at ANU in 1981
 - new nodes at UNSW and UQ in 2005
 - UQ: Advanced Data Analysis Archive Mode & Qualitative Data Archive (Mark Western & Mike Humphreys, ISSR)
 - new node at UWA in 2007
 - Electoral archives & WA studies node
 - 2007: expansion of qualitative holdings, census and colonial data, data from ARC Ageing Well Network
 - now moving to a national federated archive structure & the development of specialist sub-archives
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Australian Social Science Data Archive

- catalogue of some 2000 social science data sets
 - designed for:
 - acquisition, documentation & preservation of Australian social science data
 - management & dissemination of ARC-funded research
 - moves beyond simply being an archive to being a National social science data service
 - to preserve & disseminate data
 - actively improve data quality and research practice
 - increasing awareness & knowledge among researchers
 - adding material value to the datasets, through improvements in collection of the data & the addition of additional variables
 - development of new tools & techniques for searching, analyzing and visualizing social science data
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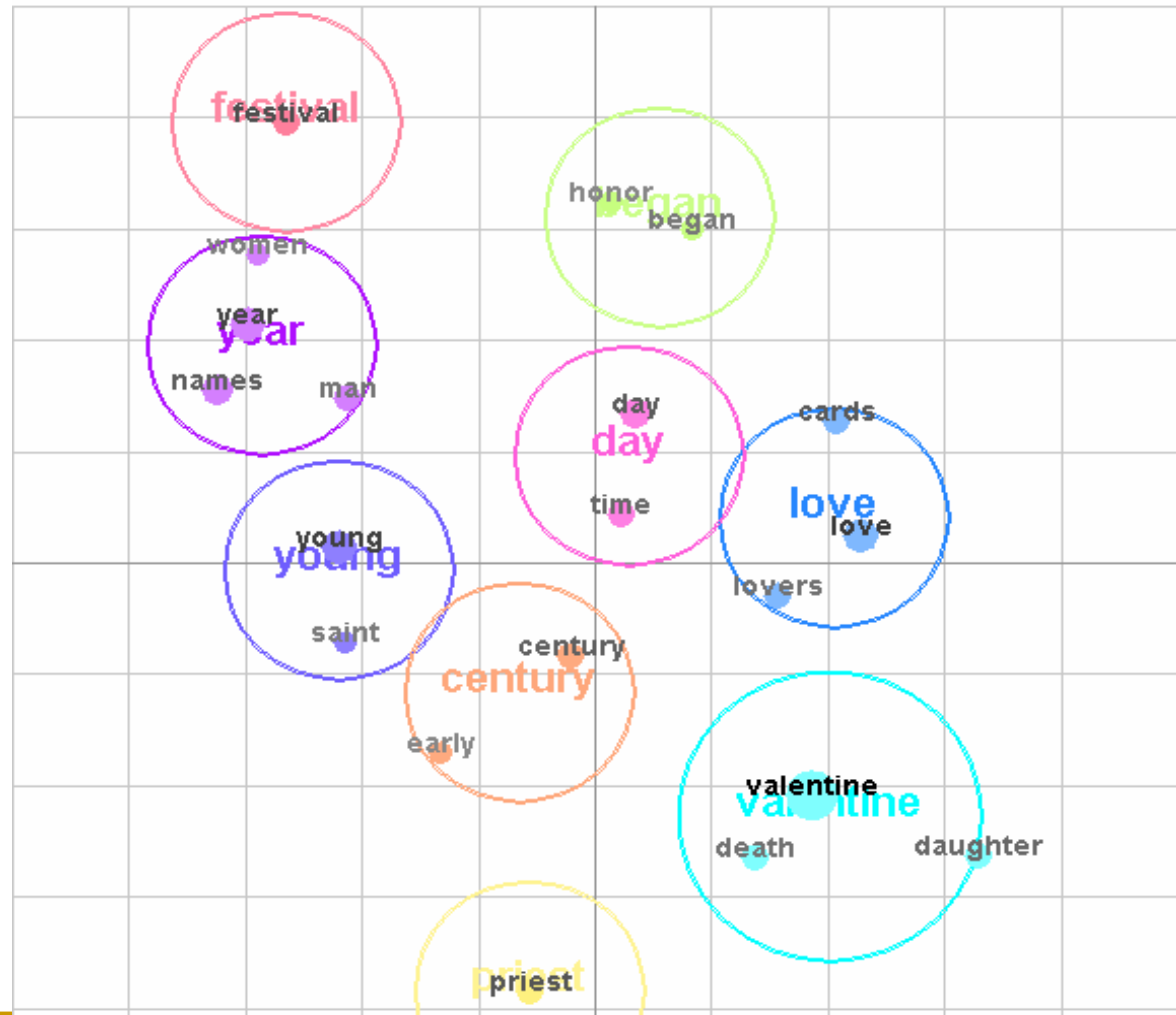
Projects supported by the Facility

- Australian Electoral Survey Series (McAllister)
 - Australian Survey of Social Attitudes (Denemark et al)
 - Neoliberalism, inequality & politics (Western)
 - Australian incomes & living standards projects (Saunders)
 - Indigenous population statistics (Rowse & Smith)
 - Negotiating the life course project (Evans & Mitchell)
 - Ageing Well Research Network (Kendig)
 - Links with the International Data Exchange Program through ICPSR (University of Michigan)

 - *capacity for data linkage considerable – bringing together demographic data, economic forecasting data, social indicators, electoral data from across sectors and across time*
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Qualitative archive

- repository of data bundles & pre-generated Leximancer topical maps
- enables the archive to:
 - contribute to secondary analysis
 - store the primary data
- metadata contains:
 - Title, author, method etc
 - also topical metadata stored as a concept co-occurrence matrix



This map was generated to summarise a set of histories describing the origins of St Valentine's Day

PMSEIC Working Group on Data for Science

■ *Recommendations:*

- ❑ funding agencies should insist upon data management plans for all grants, tenders and other funded activities which involve data capture or data generation.
 - ❑ plans should encompass proposals for long-term data archival and explain how the data will be made available for secondary use.
 - ❑ granting bodies need to appropriately value proposals which include research that will utilise existing data
 - ❑ *NSF*: applications include a data management plan that can be evaluated by peer reviewers.
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Benefits of Depositing & Archiving Data:

- *Reinforces open scientific inquiry;*
- *Encourages diversity of analysis and opinions;*
- *Promotes new research and allows for the testing of new or alternative methods;*
- *Improves methods of data collection and measurements through the scrutiny of others;*
- *Reduces costs by avoiding duplicate data collection efforts;*
- *Provides an important resource for training in research;*
- *Ensures the safekeeping of data;*
- *Allows owners to avoid the administrative tasks associated with external users and their queries;*
- *Fulfils grant obligations regarding making funded research available to the research community;*
- *Enables researchers to demonstrate continued use of the data after the original research is completed.*