

# **Presentation of Research Data in Primo**

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#### **Definition Research Data**

"Research data, unlike other types of information, is collected, observed, or created, for purposes of analysis to produce original research results."

University of Edinburgh Information Services



#### **Importance of Research Data**

- Traceability
- Well-founded results
- Availability for usage with new technologies



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#### **Problem Statement**

Task: Write a paper about the political opinions of elites, based on Mannheim research

	Books and more elite mannheim p		rch
Library	All items	<ul> <li>that contain my query words</li> <li>anywhere in the record</li> </ul>	
	0 Results for the	library's holdings	
		no appropriate literature available	
		ZA1138: Mannheim Elite Study 1968	
Gesis	Bibliographic Cita	ation Content Methodology Data & Documents Errata & Versions Further Remarks	
	Study No.	ZA1138	
	Title	Mannheim Elite Study 1968	



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#### **Problem Statement**

# Task: Compare the results of a specific book with your own work about the political opinions of elites

	Books and more       Catalog       Inter-Library Loan         Oberschicht und politisches System der Bundesrepublik Deutschland       Search       Advanced Search         All items       that contain my query words       anywhere in the record				
Library	Oberschicht und politisches System der Bundesrepublik Deutschland : soziale Mobilität und Karrieremuster von 800 Inhabern von Spitzenpositionen der westdt. Gesellschaft         Edo Enke         Bern [u.a.] : Lang 1974         Available ; several locations				
	no link to research data				
	ZA1138: Mannheim Elite Study 1968				
Gesis	Bibliographic Citation Content Methodology Data & Documents Errata & Versions Further Remarks         Publications       Enke, Edo: Oberschicht und politisches System der Bundesrepublik Deutschland. Frankfurt: Lang 1974.				



Realization

- 1. Analyze the GESIS metadata format for studies
- 2. Transform the format into a Primo compatible one
- 3. Load the data into Primo
- 4. Create links between publications and research data

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### **Metadataformat Gesis**

```
<study id="3822">
    <title>
       Mannheim Elite Study 1968
    </title>
    <principalInvestigator id="12308">
        <name>Ulrich Schleth</name>
    </principalInvestigator>
    <classification id="2839">
        <term>Political Questions</term>
    </classification>
    <publication id="3820">
        <citation>
            Enke, Edo:
            Oberschicht und politisches System der Bundesrepublik Deutschland.
            Frankfurt: Lang 1974.
        </citation>
    </publication>
</study>
```



#### Load Data into Primo

Issues to solve:

- which information is necessary and meaningful?
- how to encode this information?
- how to handle bad quality of the metadata?

Result:

- research data is integrated into Primo
- handled like bibliographic data
- searchable for users
- first problem solved



# **Exemplary Search**

Books & more GESIS	
employment and wages	search
that contain my query words 💌 anywhere in the record 💌	



1 Results for MAN GESIS

sorted by: Relevance v



#### **Examplary Study in Primo**

	Books & more GESI	S				
	employment and wages		search	advanced search		
	that contain my	query words 💌 anywhere in the record 💌				
E	Beschäftigung und Löhr DIVO, Frankfurt [Data Coll	s in German Industries between 1888 <mark>and</mark> 1954 ne der deutschen Industriewirtschaft 1888-1954 .] r Sozialwissenschaften 2010-04-13				
	Title: Employment and Wages in German Industries between 1888 and 1954 Beschäftigung und Löhne der deutschen Industriewirtschaft 1888-1954					
	Author:	DIVO, Frankfurt [Data Coll.]				
		GESIS - Leibniz-Institut für Sozialwissenschaften [Publ. Agent]	Links			
	Subjects:	Historische Sozialforschung ; Historical Social Research	> Researcl	n Data Source		
	Description: Methodik: Mündliche Befragung mit standardisiertem Fragebogen Methodik: Oral survey with standardized questionnaire Beschreibung: In der vorliegenden Studie wird versucht, Beschäftigungs- und Lohnentwicklung in Deutschland auf Grund der Unterlagen der Unfallversicherungsstatistik zu ermitteln, da die oben erwähnten Bedenken diesem Material gegenüber entfallen. Die Angaben über die Zahl der					
	Publisher:	GESIS - Leibniz-Institut für Sozialwissenschaften				
	Creation Date:	2010-04-13				



# Linking Literature and Research Data

Issues to solve:

- How to identify connections?
  - Any citations in the GESIS record?
  - Possible to use Information Retrieval methods?
- How to integrate links?

Result:

- Publications and research data enriched with links
- User can get the study on which a publication bases and vice versa
- Second problem solved



#### **Citation Format GESIS**

#### <publication id="3820">

#### <citation>

Enke, Edo:

Oberschicht und politisches System der Bundesrepublik Deutschland.

Frankfurt: Lang 1974.

</citation>

</publication>



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# **Information Retrieval**

"leading the user to those documents that will best enable him/her to satisfy his/her need for information" (Robertson 1981)

- typical application: search engines
- documents are the publications (abstract, full text)
- need for information: which study is used
- search for title, data collector, subjects, abstract,...



### **Information Retrieval Methods**

- all methods focus on the similarity between documents and the search string
- many different methods like tf-idf or n-grams
- n-gram: sub-sequence of n items of a sequence
- example: 4-grams of manipulator vs. manipulation mani anip nipu ipul pula ulat lato ator mani anip nipu ipul pula ulat lati atio tion



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#### Link Literature and Research Data

Standorte	Details	Bestand	Weitere Services		
Titel:		Altersbi	ld und Altersvorsorge der	Arbeiter und Angestellten	
Autor:		Ludwig	Ludwig von Friedeburg ;		
		Friedric	h Weltz		Links
Schlagwörter:		Arbeiter / Altersversorgung ;		> Find Primary Research Data	
		Angest	ellter / Altersversorgung		-
Verknüpfte Titel:		Frankfurter Beiträge zur Soziologie : Sonderheft ; 1			
Verlag:		Frankfu	rt am Main : Europ. Verla	gsanst.	
Erschein	nungsjahr:	1958			





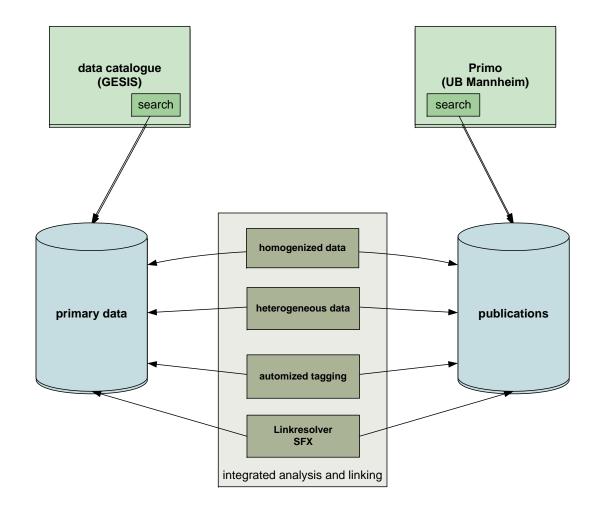
Image of the Old and Provision for Old Age for Workers and Employees Altersbild und Altersvorsorge der Arbeiter und Angestellten DIVO, Frankfurt [Data Coll.] GESIS - Leibniz-Institut für Sozialwissenschaften 2010-04-13

resdata

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#### **Project Overview**





Conclusion

- InfoLIS is a project to connect research data and literature
- goal: help users to find research data and to relate it to publications

- first steps done
- able to load research data into primo and to create links based on references



# Thank you for your attention!

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