**Open Science
Coffee Lectures**

UN A Universität Augsburg University

Research data management – what is it?

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What is digital research data?
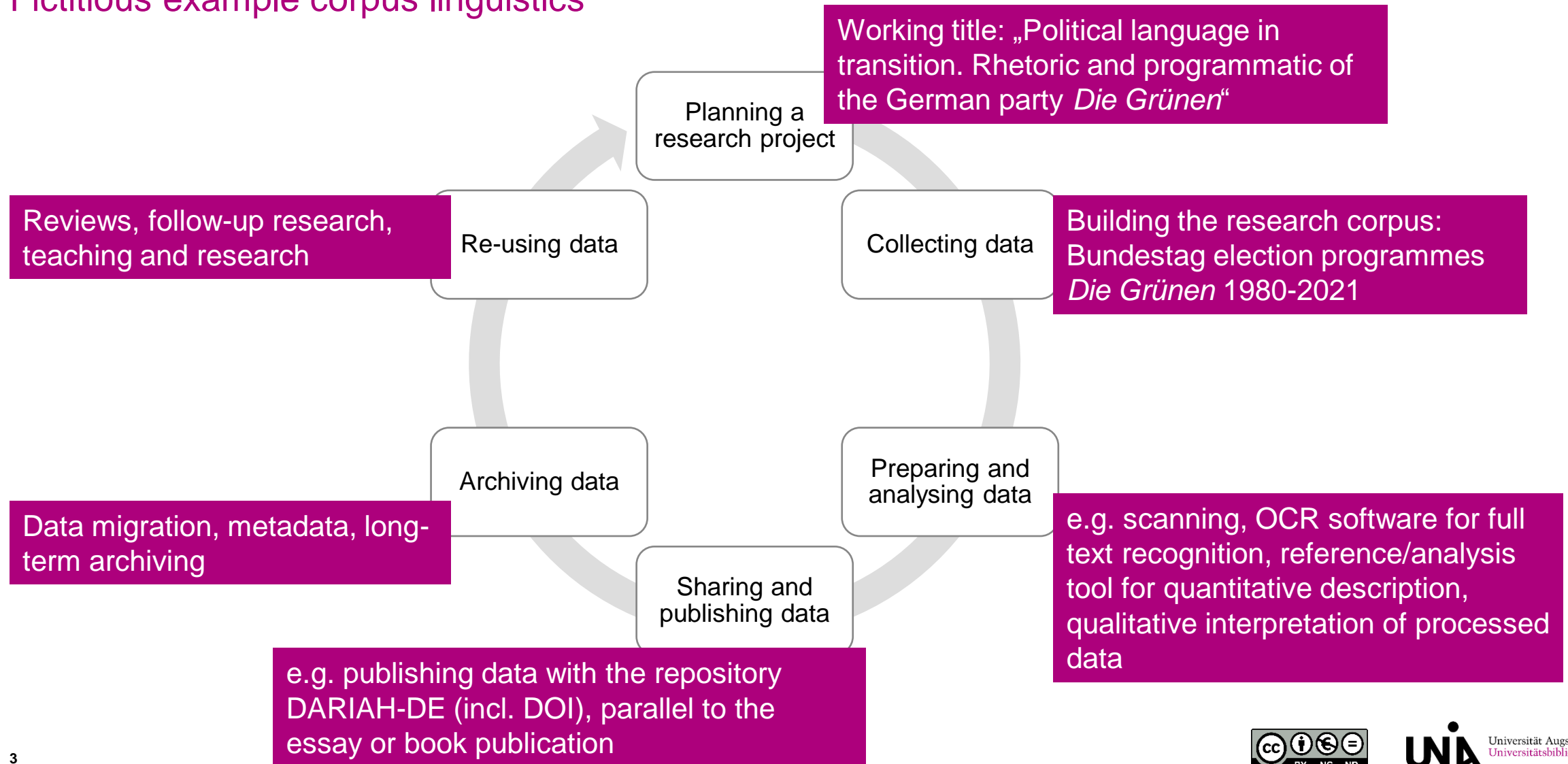
Research data….

- "… is not only comprised of the (final) results of research.

- Instead, research data comprises all data generated in the course of scientific activity", e.g. observations, experiments, simulations, surveys, interviews, source research, records, digitization, analyses.

- … comprises also "data not obtained through direct scientific activity but that is used by science for the purpose of research"[1]

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[1] German Council for Information Infrastructures (RfII), https://rfii.de/en/topics/ (last access: 2022-11-09).

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Research data lifecycle

Fictitious example corpus linguistics

Working title: „Political language in transition. Rhetoric and programmatic of the German party *Die Grünen*"

Planning a research project

Collecting data

Building the research corpus: Bundestag election programmes *Die Grünen* 1980-2021

Re-using data

Reviews, follow-up research, teaching and research

Archiving data

Preparing and analysing data

e.g. scanning, OCR software for full text recognition, reference/analysis tool for quantitative description, qualitative interpretation of processed data

Data migration, metadata, long-term archiving

Sharing and publishing data

e.g. publishing data with the repository DARIAH-DE (incl. DOI), parallel to the essay or book publication

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FAIR principles

The FAIR principles describe four core desiderata:
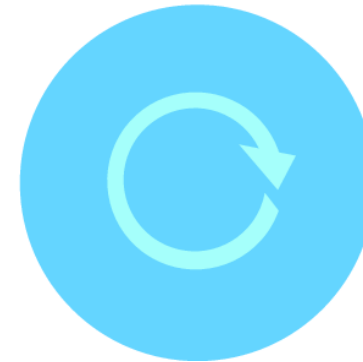
Findable   **A**ccessible   **I**nteroberable   **R**eusable

➤ Data and metadata become human- and machine-readable, making them more effectively discoverable and re-usable.

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Research data policies

A research data policy describes the requirements for handling research data.

Different organisations – different policy types:

- **journals and publishers** (e.g. Springer, Wiley)

- **research funders** (e.g. DFG, BMBF, EU)

- **institutions** (e.g. universities)

- **individual subjects** (e.g. life sciences)

- **individual projects**

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Research funder requirements

Research funder	Data provision?	RDM details requested at the time of application?	Licence requirements?
DFG	• <u>Desired</u>: research data should be made available as soon as possible. • <u>Follow subject-specific recommendations</u>	• Information based on the <u>Checklist Handling of Research Data</u>	• no higher-level • <u>Follow subject-specific recommendations</u>
BMBF	• Depends on funding programme • Usually data storage in repository after end of project	• Depends on funding programme • Usually "Verwertungsplan" or DMP	• Depends on funding programme • Usually none
Horizon Europe	• <u>Required</u>: deposit research data as soon as possible in a trusted repository • Ensure open access to the deposited data	• <u>DMP is required</u> • submit within the first six months	• CC BY licence, CC Public Domain Dedication (CC 0) or equivalent • Justify exceptions in the DMP

<u>https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/foerderrichtlinien/</u>

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What is a data management plan?

A data management plan (DMP) is a document that describes the intended handling of research data during the research process as well as after completion.

A DMP contains all information concerning the description and documentation of research data

- collection

- processing

- storage

- archiving

- publishing

A DMP can vary from a few paragraphs to several pages.

University Library Services

- Local research data management (RDM) team at the University Library.

- We offer advice and support on:
  - external subject-specific RDM services
  - data management plans for funding applications
  - publishing and re-using research data

- We also offer in-depth workshops on RDM for junior researchers, e.g. GGS, FAI, Medizin.

https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/fdm/

forschungsdaten@bibliothek.uni-augsburg.de

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Research Data Management Myth? Busted!

„RDM doesn't make sense for my project, I'm not allowed to publish my sensitive data anyway!"

A central goal of RDM is to enable the re-use of research data. However, this does not mean that all data must be published without restrictions as "open data". Rather, context-dependent solutions can be found, e.g. only metadata can be published.
FAIR also means: as open as possible, as closed as necessary!

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Coffee Lectures in the Wintersemester 2022/23

Monday, 24 October 2022	Gold, green, diamond – the colours of Open Access
Tuesday, 25 October 2022	Who pays for what? Open Access and finances
Wednesday, 26 October 2022	All online, freely available! Our self-archiving service
Thursday, 27 October 2022	Visible on your website! Our publication lists service
Friday, 28 October 2022	Who's allowed to do what? Copyright and licences
Wednesday, 9 November 2022	Research data management – what is it?
Wednesday, 23 November 2022	Education – online and open for all!
Wednesday, 7 December 2022	Spoiled for choice – journals and quality
Wednesday, 21 December 2022	Online, but where? Research tools for Open Access
Wednesday, 11 January 2023	Your thesis – 4 routes to publication
Wednesday, 25 January 2023	Searched and found! Research tools for research data
Wednesday, 8 February 2023	Listing, linking, networking – ORCIDs, GNDs and more

https://www.uni-augsburg.de/de/organisation/bibliothek/publizieren-zitieren-archivieren/fdm/

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- Paulina Halina Sieminska. (2019). A FAIRy tale graphics (1.0.0). Zenodo. https://doi.org/10.5281/zenodo.3267168 (CC BY 4.0): Slide 4

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