

This is a section of [doi:10.7551/mitpress/12200.001.0001](https://doi.org/10.7551/mitpress/12200.001.0001)

The Open Handbook of Linguistic Data Management

Edited by: Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller, Lauren B. Collister

Citation:

The Open Handbook of Linguistic Data Management

Edited by: Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller, Lauren B. Collister

DOI: 10.7551/mitpress/12200.001.0001

ISBN (electronic): 9780262366076

Publisher: The MIT Press

Published: 2022



The MIT Press

The Open Handbook of Linguistic Data Management

Open Handbook in Linguistics Series

Series Editor: Heidi B. Harley

The Open Handbook of Linguistic Data Management, Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller,
and Lauren B. Collister

The Open Handbook of Linguistic Data Management

Edited by Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller, and Lauren B. Collister

Foreword by Sarah G. Thomason

The MIT Press
Cambridge, Massachusetts
London, England

© 2021 The Massachusetts Institute of Technology

This work is subject to a Creative Commons CC-BY-NC license. Subject to such license, all rights are reserved.



This book was set in Stone Serif and Stone Sans by Westchester Publishing Services.

Library of Congress Cataloging-in-Publication Data

Names: Berez-Kroeker, Andrea L., editor. | McDonnell, Bradley James, editor. | Koller, Eve, editor. | Collister, Lauren B., editor.

Title: The open handbook of linguistic data management / edited by Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller and Lauren B. Collister.

Description: Cambridge, Massachusetts : The MIT Press, [2021] | Series: Open handbooks in linguistics series | Includes bibliographical references and index.

Identifiers: LCCN 2020044363 | ISBN 9780262045261 (hardcover)

Subjects: LCSH: Computational linguistics. | Natural language processing (Computer science) | Data mining.

Classification: LCC P98 .O64 2021 | DDC 410.285—dc23

LC record available at <https://lcn.loc.gov/2020044363>

To our parents
Ellen and Bill
Bob and Kris
Nancy and Sanford
Greta and Tom
Jon and Chris

and to linguists, present and future.

Contents

Series Foreword xi

Foreword by Sarah G. Thomason xiii

I Conceptual Foundations, Principles, and Implementation of Data Management in Linguistics

1 Data, Data Management, and Reproducible Research in Linguistics: On the Need for *The Open Handbook of Linguistic Data Management* 3

Andrea L. Berez-Kroeker, Bradley McDonnell, Lauren B. Collister, and Eve Koller

2 Situating Linguistics in the Social Science Data Movement 9

Lauren Gawne and Suzy Styles

3 The Scope of Linguistic Data 27

Jeff Good

4 Indigenous Peoples, Ethics, and Linguistic Data 49

Gary Holton, Wesley Y. Leonard, and Peter L. Pulsifer

5 The Linguistic Data Life Cycle, Sustainability of Data, and Principles of Solid Data Management 61

Eleanor Mattern

6 Transforming Data 73

Na-Rae Han

7 Archiving Research Data 89

Helene N. Andreassen

8 Developing a Data Management Plan 101

Susan Smythe Kung

9 Copyright and Sharing Linguistic Data 117

Lauren B. Collister

10 Linguistic Data in the Long View 129

Laura Buszard-Welcher

11 Guidance for Citing Linguistic Data 143

Philipp Conzett and Koenraad De Smedt

12 Metrics for Evaluating the Impact of Data Sets 157

Robin Champieux and Heather L. Coates

13 The Value of Data and Other Non-traditional Scholarly Outputs in Academic Review, Promotion, and Tenure in Canada and the United States 171

Juan Pablo Alperin, Lesley A. Schimanski, Michelle La, Meredith T. Niles, and Erin C. McKiernan

II Data Management Use Cases

14 Managing Sociolinguistic Data with the Corpus of Regional African American Language (CORAAAL) 185

Tyler Kendall and Charlie Farrington

15 Managing Data for Integrated Speech Corpus Analysis in *SPeech Across Dialects of English (SPADE)* 195

Morgan Sonderegger, Jane Stuart-Smith, Michael McAuliffe, Rachel Macdonald, and Tyler Kendall

16 Data Management at the uOttawa Sociolinguistics Laboratory 209

Shana Poplack

17 Managing Legacy Data in a Sociophonetic Study of Vowel Variation and Change 221

James Grama

18 Managing Sociophonetic Data in a Study of Regional Variation 237

Valerie Fridland and Tyler Kendall

19 Data Management Practices in an Ethnographic Study of Language and Migration 249

Lynnette Arnold

20 Managing Conversation Analysis Data 257

Elliott M. Hoey and Chase Wesley Raymond

- 21 Managing Sign Language Data from Fieldwork** 267
Nick Palfreyman
- 22 Managing Data in a Language Documentation Corpus** 277
Christopher Cox
- 23 Managing Data for Writing a Reference Grammar** 287
Nala H. Lee
- 24 Managing Lexicography Data: A Practical, Principled Approach Using FLEx (FieldWorks Language Explorer)** 301
Christine Beier and Lev Michael
- 25 Managing Data from Archival Documentation for Language Reclamation** 315
Megan Lukaniec
- 26 Managing Data for Descriptive and Historical Research** 327
Don Daniels and Kelsey Daniels
- 27 Managing Historical Data in the Chirila Database** 335
Claire Bower
- 28 Managing Historical Linguistic Data for Computational Phylogenetics and Computer-Assisted Language Comparison** 345
Tiago Tresoldi, Christoph Rzymiski, Robert Forkel, Simon J. Greenhill, Johann-Mattis List, and Russell D. Gray
- 29 Managing Computational Data for Models of Language Acquisition and Change** 355
Matthew Lou-Magnuson and Luca Onnis
- 30 Managing Sign Language Acquisition Video Data: A Personal Journey in the Organization and Representation of Signed Data** 367
Julie A. Hochgesang
- 31 Managing Acquisition Data for Developing Large Sesotho, English, and French Corpora for CHILDES** 385
Katherine Demuth
- 32 Managing Phonological Development Data within PhonBank: The Chisasibi Child Language Acquisition Study** 391
Yvan Rose and Julie Brittain
- 33 Managing Oral and Written Data from an ESL Corpus from Canadian Secondary School Students in a Compulsory, School-Based ESL Program** 401
Philippa Bell, Laura Collins, and Emma Marsden
- 34 Managing Second Language Acquisition Data with Natural Language Processing Tools** 411
Scott A. Crossley and Kristopher Kyle
- 35 Managing Data Workflows for Untrained Forced Alignment: Examples from Costa Rica, Mexico, the Cook Islands, and Vanuatu** 423
Rolando Coto-Solano, Sally Akevai Nicholas, Brittany Hoback, and Gregorio Tiburcio Cano
- 36 Managing Transcription Data for Automatic Speech Recognition with Elpis** 437
Ben Foley, Daan van Esch, and Nay San
- 37 Managing Data and Statistical Code According to the FAIR Principles** 447
Laura A. Janda
- 38 Managing Synchronic Corpus Data with the British National Corpus (BNC)** 453
Stefan Th. Gries
- 39 Managing Data in Sign Language Corpora** 463
Onno Crasborn
- 40 Managing Sign Language Video Data Collected from the Internet** 471
Lynn Hou, Ryan Lepic, and Erin Wilkinson
- 41 Managing Data from Social Media: The Indigenous Tweets Project** 481
Kevin P. Scannell
- 42 Managing Semantic Norms for Cognitive Linguistics, Corpus Linguistics, and Lexicon Studies** 489
Bodo Winter
- 43 Managing Treebank Data with the Infrastructure for the Exploration of Syntax and Semantics (INESS)** 499
Victoria Rosén and Koenraad De Smedt
- 44 Managing Data in a Formal Syntactic Study of an Underinvestigated Language (Uzbek)** 513
Vera Gribanova

- 45 Managing Data for Theoretical Syntactic Study of Underdocumented Languages** 523
Philip T. Duncan, Harold Torrence,
Travis Major, and Jason Kandybowicz
- 46 Managing Experimental Data in a Study of Syntax** 531
Matthew Wagers
- 47 Managing Web Experiments for Psycholinguistics: An Example from Experimental Semantics/Pragmatics** 539
Judith Degen and Judith Tonhauser
- 48 Managing, Sharing, and Reusing fMRI Data in Computational Neurolinguistics** 547
Hiroyuki Akama
- 49 Managing Phonological Data in a Perception Experiment** 557
Rory Turnbull
- 50 Managing Speech Perception Data Sets** 565
Anne Cutler, Mirjam Ernestus, Natasha Warner,
and Andrea Weber
- 51 Managing and Analyzing Data with Phonological CorpusTools** 575
Kathleen Currie Hall, J. Scott Mackie,
and Roger Yu-Hsiang Lo
- 52 Managing Phonological Inventory Data in the Development of PHOIBLE** 589
Steven Moran
- 53 Managing Data in a Typological Study** 597
Volker Gast and Łukasz Jędrzejowski
- 54 Managing Data for Descriptive Morphosemantics of Six Language Varieties** 609
Malin Petzell and Caspar Jordan
- 55 Managing Data in TerraLing, a Large-Scale Cross-Linguistic Database of Morphological, Syntactic, and Semantic Patterns** 617
Hilda Koopman and Cristina Guardiano
- 56 Managing AUTOTYP Data: Design Principles and Implementation** 631
Alena Witzlack-Makarevich, Johanna Nichols,
Kristine A. Hildebrandt, Taras Zakharko, and
Balthasar Bickel

Contributors 643

Index 651

© 2021 The Massachusetts Institute of Technology

This work is subject to a Creative Commons CC-BY-NC license. Subject to such license, all rights are reserved.



This book was set in Stone Serif and Stone Sans by Westchester Publishing Services.

Library of Congress Cataloging-in-Publication Data

Names: Berez-Kroeker, Andrea L., editor. | McDonnell, Bradley James, editor. | Koller, Eve, editor. | Collister, Lauren B., editor.

Title: The open handbook of linguistic data management / edited by Andrea L. Berez-Kroeker, Bradley McDonnell, Eve Koller and Lauren B. Collister.

Description: Cambridge, Massachusetts : The MIT Press, [2021] | Series: Open handbooks in linguistics series | Includes bibliographical references and index.

Identifiers: LCCN 2020044363 | ISBN 9780262045261 (hardcover)

Subjects: LCSH: Computational linguistics. | Natural language processing (Computer science) | Data mining.

Classification: LCC P98 .O64 2021 | DDC 410.285—dc23

LC record available at <https://lcn.loc.gov/2020044363>