1. Record Nr. UNINA9910373923703321 Autore Cimiano Philipp Titolo Linguistic Linked Data: Representation, Generation and Applications // by Philipp Cimiano, Christian Chiarcos, John P. McCrae, Jorge Gracia Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-30225-3 Edizione [1st ed. 2020.] 1 online resource (XVI, 286 p.) Descrizione fisica 006 Disciplina Knowledge representation (Information theory) Soggetti Natural language processing (Computer science) Application software Knowledge based Systems Natural Language Processing (NLP) Computer Appl. in Arts and Humanities Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Nota di contenuto 1 Introduction -- 2 Preliminaries -- 3 Linguistic Linked Open Data Cloud -- 4 Modelling lexical resources as Linked Data -- 5 Representing annotated texts as RDF -- 6 Modelling linguistic annotations -- 7 Modelling metadata of language resources -- 8 Linguistic Categories -- 9 Converting language resources into Linked Data -- 10 Link Representation and Discovery -- 11 Linked Data-based NLP Workflows -- 12 Applying linked data principles to linking multilingualWordnets -- 13 Linguistic Linked Data in Digital Humanities -- 14 Discovery of language resources -- 15 Conclusion. Sommario/riassunto This is the first monograph on the emerging area of linguistic linked data. Presenting a combination of background information on linguistic linked data and concrete implementation advice, it introduces and discusses the main benefits of applying linked data (LD) principles to

the representation and publication of linguistic resources, arguing that LD does not look at a single resource in isolation but seeks to create a large network of resources that can be used together and uniformly, and so making more of the single resource. The book describes how

the LD principles can be applied to modelling language resources. The first part provides the foundation for understanding the remainder of the book, introducing the data models, ontology and guery languages used as the basis of the Semantic Web and LD and offering a more detailed overview of the Linguistic Linked Data Cloud. The second part of the book focuses on modelling language resources using LD principles, describing how to model lexical resources using Ontolexlemon, the lexicon model for ontologies, and how to annotate and address elements of text represented in RDF. It also demonstrates how to model annotations, and how to capture the metadata of language resources. Further, it includes a chapter on representing linguistic categories. In the third part of the book, the authors describe how language resources can be transformed into LD and how links can be inferred and added to the data to increase connectivity and linking between different datasets. They also discuss using LD resources for natural language processing. The last part describes concrete applications of the technologies: representing and linking multilingual wordnets, applications in digital humanities and the discovery of language resources. Given its scope, the book is relevant for researchers and graduate students interested in topics at the crossroads of natural language processing / computational linguistics and the Semantic Web / linked data. It appeals to Semantic Web experts who are not proficient in applying the Semantic Web and LD principles to linguistic data, as well as to computational linguists who are used to working with lexical and linguistic resources wanting to learn about a new paradigm for modelling, publishing and exploiting linguistic resources.