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Titolo Towards the Multilingual Semantic Web [[electronic resource]]:

Principles, Methods and Applications / / edited by Paul Buitelaar,

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Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Part Principles -- Overcoming Linguistic Barriers to the Multilingual

Semantic Web -- Design Patterns for Engineering the Ontology-Lexicon Interface -- Context and Terminology in the Multilingual Semantic Web -- The Multilingual Semantic Web as Virtual Knowledge Commons: The Case of the Under-resourced South African Languages -- A three-dimensional paradigm for conceptually scoped language technology -- Towards Verbalizing Multilingual N-ary Relations -- Part Methods -- Publishing Linked Data on the Web: the Multilingual Dimension -- State-of-the-art in Multilingual and Cross-Lingual Ontology Matching

-- Mind the cultural gap: bridging language specific DBpedia chapters for Question Answering -- Multilingual Extraction Ontologies -- Collaborative Management of Multilingual Ontologies -- From RDF to Natural Language and Back -- Multilingual Natural Language Interaction with Semantic Web Knowledge Bases and Linked Open Data -- A Cross-Lingual Correcting and Completive Method for Multilingual Ontology Labels -- A Cross-Lingual Correcting and Completive Method for Multilingual Ontology Labels -- Multilingual Lexicalisation and Population of Event Ontologies. A Case Study for Social Media -- Part Applications -- Semantically-Assisted XBRL-Taxonomy Alignment Across Languages -- Lexicalizing a multilingual ontology for searching in the Assistive Technology domain -- Service Oriented Architecture for Interoperability of Multi-Language Services.

Sommario/riassunto

To date, the relation between multilingualism and the Semantic Web has not yet received enough attention in the research community. One major challenge for the Semantic Web community is to develop architectures, frameworks and systems that can help in overcoming national and language barriers, facilitating equal access to information produced in different cultures and languages. As such, this volume aims at documenting the state-of-the-art with regard to the vision of a Multilingual Semantic Web, in which semantic information will be accessible in and across multiple languages. The Multilingual Semantic Web as envisioned in this volume will support the following functionalities: (1) responding to information needs in any language with regard to semantically structured data available on the Semantic Web and Linked Open Data (LOD) cloud, (2) verbalizing and accessing semantically structured data, ontologies or other conceptualizations in multiple languages, (3) harmonizing, integrating, aggregating, comparing and repurposing semantically structured data across languages, and (4) aligning and reconciling ontologies or other conceptualizations across languages. The volume is divided into three main sections: Principles, Methods and Applications. The section on "Principles" discusses models, architectures, and methodologies that enrich the current Semantic Web architecture with features necessary to handle multiple languages. The section on "Methods" describes algorithms and approaches for solving key issues related to the construction of the Multilingual Semantic Web. The section on "Applications" describes the use of Multilingual Semantic Web based approaches in the context of several application domains. This volume is essential reading for all academic and industrial researchers who want to embark on this new research field at the intersection of various research topics, including the Semantic Web, Linked Data, natural language processing, computational linguistics, terminology, and information retrieval. It will also be of great interest to practitioners who are interested in re-examining their existing infrastructure and methodologies for handling multiple languages in Web applications or information retrieval systems.