

The main premise of this book is that information professionals are, due to their experience of knowledge organisation systems and subject domain knowledge, ideally placed to contribute to the semantic web and information retrieval, particularly through the development and use of ontologies. Furthermore, as stated on the back cover, the author's aim is to provide "an accessible introduction and exploration of ontologies".

Why ontologies? Because "those who successfully find ways of managing the information overload, and of making use of the increasing quantities of data available, will have the competitive advantage." (p. 4)

If you are a student or new to linked data, the semantic web and the role of ontologies within it, this book will be a useful guide to these areas as they relate to information professionals. The author's writing style is concise, clear and each argument is supported by well-chosen references. The arrangement of the chapters follows a logical progression whilst equally allowing the reader to dip straight in to areas of specific interest.

The first two chapters are introductory ones. The first chapter clarifies the position of ontologies in relation to other knowledge organisation systems and emphasises their value before offering a preferred definition: "An ontology is a formal representation of knowledge with rich semantic relationships between terms." (p. 12) The second chapter focuses on the elements and standards which form the semantic web stack, introducing the concepts of RDF, RDFS, OWL, SPARQL and others. It also evidences the involvement of libraries and other cultural heritage institutions with the semantic web to date.

Chapters three and four outline some of the dominant ontologies information professionals are likely to encounter and emphasise the importance of ontology re-use. The third chapter begins with a closer look at RDF, SKOS, OWL2 and others used in ontology construction. It then categorises and provides introductory paragraphs for, amongst others, Dublin Core, the Bibliographic Ontology, FRBR, RDA, EDM, CIDOC-CRM, FOAF, DBpedia and Schema.org. The fourth chapter guides the reader through available tools for sourcing existing ontologies and methods of evaluating an ontology's suitability for use.

Chapters five and six, on building and interrogating ontologies respectively, are where things get really interesting. The fifth chapter offers a useful overview, identifying three types of methodologies for ontology creation and a twelve-step practical approach. An ontology development example, 'Bibliometric Metrics Ontology element set', following these steps is also provided. The sixth chapter explores three reasons for ontology interrogation: suitability for re-use, information extraction and analysis of an ontology's use. It then looks at currently available search technologies appropriate to each of the three stated reasons.

The reality is that "information professionals are far more likely to use an ontology or knowledge base than develop one" (p. 135) and that many of the tools available for exploring ontologies are currently "aimed at computer scientists or professional ontologists rather than the casual user." (p. 154) However, in these two chapters the author re-asserts his view that it is important for information professionals to not only use but also build ontologies because many areas "still require the development of ontologies" (p. 97) and "it is only through the development of ontologies that we come to fully appreciate the associated tools and technologies." (p. 97)

It is then up to the final chapter, chapter seven, to sum up and look to the future of ontologies in general and the role of the information professional in particular. The author envisages that “ontologies will undoubtedly be increasingly embedded within many of the traditional roles of the information professional, such as cataloguing, classifying and indexing, as well as newer roles such as supporting the publication of data and gathering new indicators of impact.” (p. 158)

If you take one thing away having read this book, I hope it is this. As library services evolve to meet the information needs of today’s researcher the skills of information professionals must also adapt and evolve. Taking the time to become familiar with firstly, the role of ontologies both within the semantic web and within libraries, and secondly, the practicalities of ontology re-use and creation, whilst not necessarily being easy, is a very worthwhile, natural and perhaps even essential step forward for today’s cataloguer and indexer.