

FRBR, RDA and Law Libraries

Abstract: Over the past few years the cataloguing community has seen radical changes in cataloguing standards, changes which appear to have been largely ignored by legal information professionals. This is a mistake according to Helen Doyle; the new cataloguing model can have enormous implications for the legal community, particularly in the spheres of information and knowledge management, and the profession is missing a huge opportunity by ignoring it. A new cataloguing standard (RDA) has been developed based on an alternative theoretical approach, known as “Functional Requirements for Bibliographic Records” (FRBR). FRBR seeks to change the way we approach the bibliographic universe: from stand-alone, individual repositories of information to networks of linked data built on a structured hierarchy. Commercial law firms are constantly trying to make connections between their traditional resources, online repositories, internal know-how, etc, but struggle to achieve complete synchronicity. FRBR provides a solution to this knowledge management problem: all resources (including people, events and subjects) become searchable, and because everything is linked, users can access information by navigating to it, establishing their own pathway through the data. Moreover, the major legal databases are already utilising linked data in this way – it is time for law firms to catch up.

Keywords: Functional Requirements for Bibliographic Records (FRBR); Resource Description and Access (RDA); cataloguing; knowledge management; legal information; law libraries

INTRODUCTION

There have been lots of exciting changes that have happened recently in the world of cataloguing, and we now have a new cataloguing standard. *Resource Description and Access* (RDA) is built on a theoretical model known as *Functional Requirements for Bibliographic Records* (FRBR) and adopts a completely new approach to the cataloguing of bibliographic materials and other library items.

It appears, however, that most law libraries have completely ignored all this. A very informal survey of some law libraries demonstrated that 75% had no idea that the changes had happened or were happening, let alone what those changes might consist of, and the two libraries that did have some idea were both part of academic institutions which had already implemented RDA as their new cataloguing standard.

Yet RDA and FRBR have the potential to have far-reaching consequences and a huge impact on law libraries. So what are RDA and FRBR? Why do they matter? And what can law libraries do with them?

First, some background. FRBR was first published as a theory by IFLA in 1998¹, so in some respects its ideas are not new. The basic cataloguing standard which people are arguably most familiar with is AACR2, the second edition of which was published in 2002. Work duly began

on a third edition, but it was soon felt that the so-called ‘AACR3’ was simply not up to the task of coping with today’s bibliographic universe. The original AACR was developed in the 1960s, long before CDs, DVDs, USBs, the internet and all the other media formats and resources we have today. A new approach was needed. RDA was first released as the successor to AACR2 in 2010 and, after an initial testing phase, was adopted by the British Library, the Library of Congress and the libraries of Oxford and Cambridge in March 2013 as their official cataloguing standard.

Before we get into what this means for law libraries, it is necessary to establish how RDA differs from AACR2. RDA is built on the theory of FRBR, which involves looking at the bibliographic universe in a completely different way. A good example to demonstrate this is to use the works of Jane Austen, and specifically *Pride and Prejudice*².

THE THEORY OF FRBR

There are many, many bibliographic items associated with *Pride and Prejudice*. You might be lucky enough to have a copy of the first edition, published in 1813, in your collection, but if not a more modern copy is likely, perhaps

the 2003 Penguin Classics edition or a Kindle edition purchased from Amazon. Resources are not limited to text – the celebrated BBC TV series starring Colin Firth and Jennifer Ehle was released on video in 1995, and in 2005 a film version was released starring Keira Knightley. The book has been translated into many other languages, and a library collection may well contain a version in, say, French. Spin-offs such as *Death Comes to Pemberley* (a 2012 bestseller by PD James) are popular, as are retellings of the story, such as Helen Fielding's novel *Bridget Jones's Diary* and its accompanying film. Finally, we move from the sublime to the ridiculous with parodies such as *Pride and Prejudice and Zombies*, a 2009 cult novel by Seth Grahame-Smith, who generously credits Austen as a co-author. These items are all connected to the original *Pride and Prejudice* in some way, in varying degrees of closeness. There are also connections within the connections. For example, Colin Firth starred in both the 1995 TV series and the film of *Bridget Jones's Diary*, and Andrew Davies wrote the screenplay for both.

A library user approaching this collection needs a way to navigate through it, and the traditional starting point is the library catalogue. But it soon becomes apparent that catalogues today are simply not good enough to give the user what s/he needs. For example, take the following catalogue record:

This record is a standalone piece of information about this particular item, and there is no indication that any other versions, editions or related items even exist. The only 'clickable' link is the author and although publisher and series information is given, it is not possible to see what else the library has in these categories (I would have to run an entirely new search to achieve this). Imagine I am a student wanting to search for all titles by female authors in the 18th century. The record contains that information but I cannot make any use of it – the record is not interlinked or connected to anything else.

This is a persistent problem. Library records for *Bridget Jones's Diary* rarely mention *Pride and Prejudice*, let alone explicitly stating that the film is based on the book. If I am studying the impact of *Pride and Prejudice* on

modern-day culture, I want to know this item is relevant and available! *Pride and Prejudice and Zombies* is clearly a parody but again, that is rarely made explicit in the catalogue record and other 'spin-offs' are not so obviously differentiated. Traditional catalogue records are standalone pieces of information relating to one library item, with no way to navigate between them or find out what else a library has on a particular topic without running an entirely new search.

FRBR presents a way of linking all these resources together, so you can see not only the information about the items but also how they relate to each other and to the overarching theme of *Pride and Prejudice*. This involves a new way of thinking about library items. It is no longer a case of creating one standalone record for each one but rather of linking them together. FRBR provides the structure for achieving this.

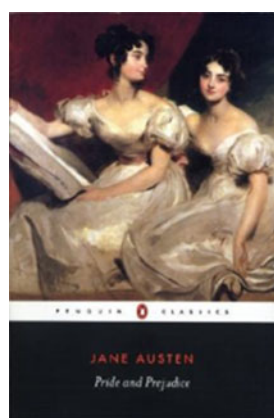
In other words, traditional cataloguing works somewhat like diagram A. A user runs a search and gets a list of results. If you want a different list, you have to run a new search.

Applying FRBR to a set of resources creates a catalogue which looks more like diagram B, where all the records are interlinked in a structured hierarchy. The catalogue becomes much more dynamic and the user can navigate around it much more easily.

So how does FRBR achieve this result?

FRBR posits the idea that there is an overarching concept that we will call "*Pride and Prejudice*". The FRBR report defines this as "a distinct intellectual or artistic creation"³. In FRBR jargon, this is called the 'Work'. If you say "*Pride and Prejudice* is such a great story", you are probably not thinking of a particular copy of a particular edition. Instead you are referring to the concept of the story as a whole i.e. you are referring to the Work.

The Work needs to be expressed in some way, to exist in the world. The FRBR report defines this as "a specific intellectual or artistic form that a Work takes each time it is 'realized'"⁴ and assigns it the title of



Title: *Pride and prejudice.*

Author: Austen, Jane.

ISBN: 9780141439518

Personal Author: Austen, Jane, 1775-1817

Publication Date: 2003

Publication Information: Penguin, 2003.

Series: Penguin classics

Series Title: Penguin classics

Abstract: *Pride and Prejudice* is one of the best loved and most intimately known of Jane Austen's novels. Her sense of comedy and satire makes this an enduring classic of English literature.

Copies: 6

Figure 1: Catalogue record for *Pride and Prejudice*, published 2003 by Penguin Classics (Shepherd's Bush OPAC).

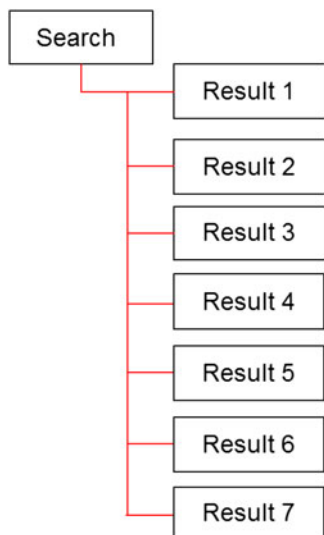


Figure 2: Diagram A: The structure of a traditional catalogue search.

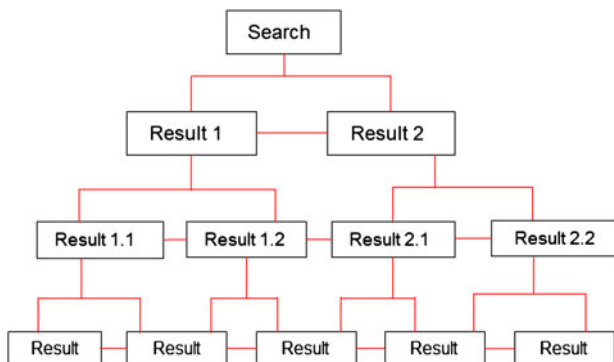


Figure 3: Diagram B: The structure of a FRBR-ised cataloguing system.

‘Expression’. Examples, might include *Pride and Prejudice* as a text, or a film, or a translation, or an audio file – some way in which the concept of *Pride and Prejudice* is made real in the world.

An Expression then has to exist in some kind of physical format. These are known as Manifestations – the FRBR report says a manifestation is “the physical embodiment of an expression of a work”⁵.

Finally we have Items, defined as “a single exemplar of a manifestation”⁶. For example, my local library has three copies of the 2003 Penguin classics edition – that’s three items. You can have different information relating to each item.

In diagrammatic terms, this looks as in Figure 4:

The upshot of this is that all my resources are now linked in this pyramid-shaped structure, and a user can move around the diagram at will. If I am looking at the record for the on-loan copy of the item in Shepherd’s Bush library I can search across the Item level to find the copy on the shelves, then go up to the ‘Penguin Classics’ Manifestation and perhaps move across to another Manifestation e.g. 2005 film. I could then go up to Film Expression and back down to 1995 TV series. I can move around the diagram without running any other searches or generating lists of standalone data.

We can also link in the spin-offs, parodies, and sequels – items which are related but slightly more distantly. I think we have to say that *Bridget Jones’s Diary*, *Death Comes to Pemberley* and *Pride and Prejudice and Zombies* are all Works in their own right – all distinct artistic or intellectual creations, and so all requiring their own pyramids of Expressions, Manifestations and Items. However, we can then link each of these to our original *Pride and Prejudice* pyramid and specify the relationship between them, as shown in Figure 5:

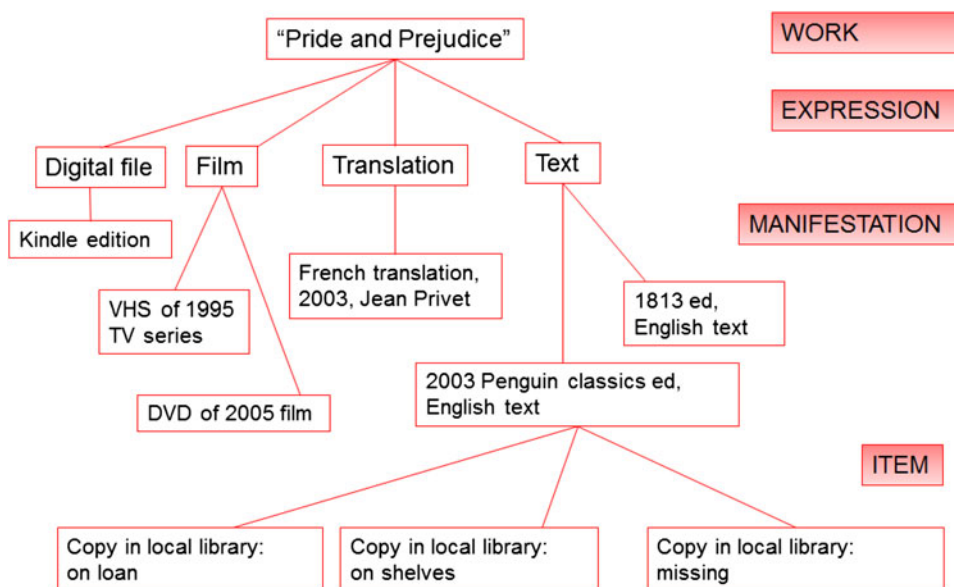


Figure 4: FRBR diagram of selected *Pride and Prejudice* resources.

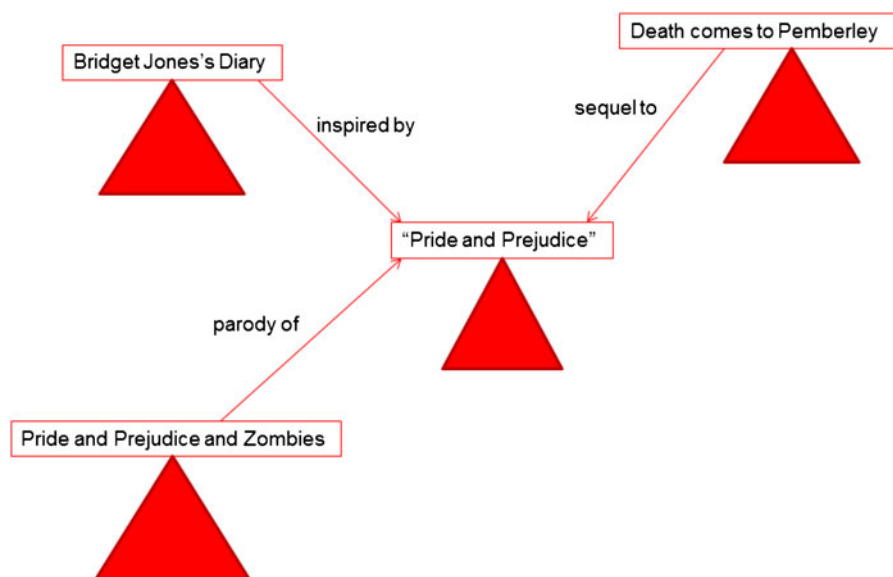


Figure 5: FRBR diagrams for related Works.

Now everything is linked together. A user looking through the data for *Pride and Prejudice and Zombies* can work their way up that pyramid and along the relationship line to *Pride and Prejudice* itself, and from there out to other spin-off works, if they so wish.

We can also be even more granular and add in people and events that are linked to resources. Taking the Film Expression as an example, we can create pieces of data and link them to the appropriate level, for example Austen's dates of birth and death, extra information about the TV series etc (see figure 6):

A user could then travel through these links as well. For example, a user might start off in Film Expressions of *Pride and Prejudice* and then move to the 1995 TV series Manifestation. They may then move to the screenplay by Andrew Davies. Other linked records would allow them to view other screenplays by Andrew Davies, which would lead them to *Bridget Jones's Diary*, which would lead them to Helen Fielding, which would lead on to other novels by Helen Fielding etc. A user could explore other costume dramas that won a Bafta, other films

starring Colin Firth, or search for other novelists born in 1775 – however their interest took them.

HOW DOES THIS RELATE TO LAW LIBRARIES?

Clearly there are not many sequels to *Clerk & Lindsell* or parodies of *Chitty on Contracts* available, and so it might be tempting to dismiss some of these as irrelevant to the Law Library field. But what if we repurpose this model for the resources we do have? Instead of having a "title" as a Work, what if we had a practice area such as Contract law? Expressions then become the specific forms that contract law takes in a particular library, such as textbooks, journals articles, precedents or digital files. Manifestations of those Expressions will be the physical embodiments of them, so for example among our Contracts textbooks we have *Chitty on Contracts* and *Cheshire, Fifoot and Furmston*. The Items will then be the actual physical copies the library has. Figure 7 shows how the FRBR framework might be applied in this instance.

Now rather than pulling up lists of contract resources, we can navigate through the collection. Imagine, for example, that I know a partner has a copy of *Chitty*. I can then move sideways to other copies of that Manifestation or up to the Textbooks Expression and back down to other textbooks, or sideways to journal articles.

We can also put in other connections and related information. For example, *Chitty* was originally published in 1826. What other books or contract books does the library have that were published then? The current editor is H.G. Beale, who is a professor of law at Warwick and a QC. Do we have any other resources by academic professors? Or other resources written by a QC?

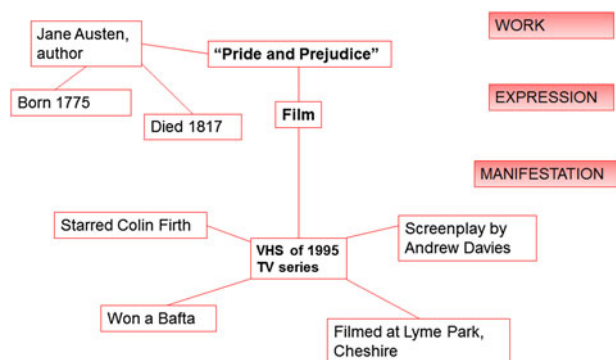


Figure 6: Additional relationships expressed in FRBR.

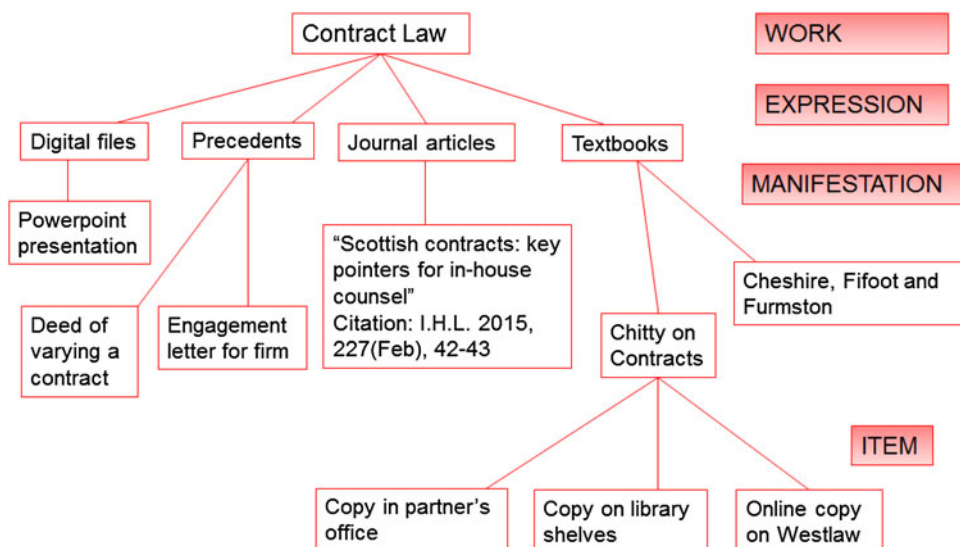


Figure 7: FRBR for Contract Law.

To demonstrate another example, imagine the arrangement in Figure 8:

A user could now navigate as follows:

Partner A wrote a precedent (bottom left-hand circle). The user knows this and searches for Partner A in the catalogue. The linked records allow the user to navigate up to the record of the text of the precedent, where they discover that the precedent was written in conjunction with Partner B. The user navigates up to the Manifestation level from Partner B and discovers that other resources by Partner B include some webinar slides. The slides are actually part of a conference, and the user clicks through to the record for the conference itself. Related records include a copy of the conference papers, and it just so happens that there is a copy of the papers in the library, shelved at N310. The user has thus

managed to navigate from their starting point of Partner A to a conference article that they previously did not know existed. It would have been almost impossible to locate this article in a traditional catalogue because the user did not know what they were looking for and would not have known which search terms to use. In this instance the user has navigated through the links step-by-step to discover a previously unknown resource.

HOW MIGHT SUCH A SYSTEM LOOK IN PRACTICE?

Unfortunately there is as yet no library management system which can display all the linked data aspects of RDA (though this looks set to change in the near future).

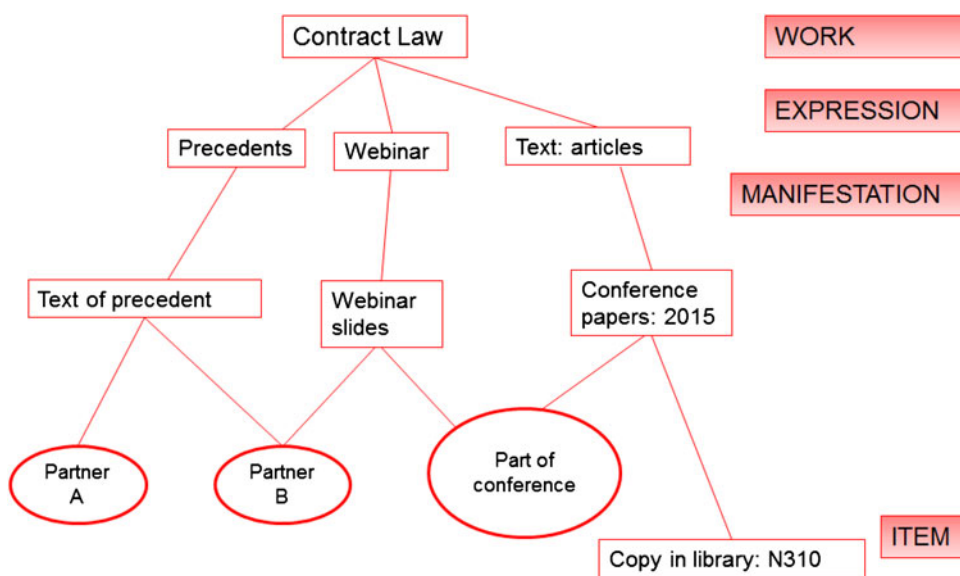


Figure 8: Putative catalogue arrangement of selected contract resources.

Relationship	Heading	
Work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i>	<input type="checkbox"/>
Author	Austen, Jane, 1775-1817	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Computer program	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Text. English	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Text. French	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Two-dimensional moving image	<input type="checkbox"/>
Related work	Bridget Jones's diary (Motion picture : 2001)	<input type="checkbox"/>
Related work	Grahame-Smith, Seth. <i>Pride and prejudice and zombies</i>	<input type="checkbox"/>
Related work	James, P. D. <i>Death comes to Pemberley</i>	<input type="checkbox"/>

Figure 9: R-tree for *Pride and Prejudice*, Work level displayed only.

Everything is still MARC-based and MARC cannot easily cope with FRBR and RDA. However, Deborah and Richard Fritz have developed a system called *RDA In Many Metadata Formats* – or RIMMF. It is freely available to download online⁷ and there are self-guided tutorials in using it. It is not a Library Management System and so it does not have the capability to handle circulation, orders, invoices, serials etc. There is also no OPAC. Instead it is a visualisation tool, designed to display pure RDA and allow users to learn (a). how RDA works and (b). what a FRBR-ised catalogue might look like.

Figure 9 shows the Work level for our earlier *Pride and Prejudice* resources displayed in RIMMF (the displays are known as relationship-trees or R-trees):

It is then possible to 'drill down' through the levels to access further resource information. Figure 10 shows the R-tree opened up to show the Text.English manifestation:

It is also possible to see the associated items here, as well as associated persons (in this case, the editor Vivien Jones).

This is much more structured than a traditional search results list. All the information is laid out clearly, I can access other related works, and I can see how each resource relates to the others.

Applying the same principles to our selection of contract law resources produces the following R-tree:

Below, Figure 12 shows the fully-opened Text Expression:

Both the textbooks mentioned earlier can be seen, and additional information has been added to *Chitty on Contracts*. The individual items relating to *Chitty* are also clearly displayed.

RIMMF is still in the early stages of development and there is clearly some way to go before an LMS is working to this level. However, it is a very useful way to see how the FRBR theory might be displayed in practice, linking records together and making explicit connections between events and people, and resources and items. The visual hierarchy is another key feature of this approach, to orientate the user within the records.

Relationship	Heading	
Work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i>	<input type="checkbox"/>
Author	Austen, Jane, 1775-1817	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Computer program	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Text. English	<input type="checkbox"/>
Manifestation of expression	<i>Pride and prejudice</i> . Penguin Classics. 2003. Volume	<input type="checkbox"/>
Exemplar of manifestation	H&F000001	<input type="checkbox"/>
Exemplar of manifestation	H&F000002	<input type="checkbox"/>
Exemplar of manifestation	H&F000003. missing	<input type="checkbox"/>
Other person, family, or corporate body associated with a manifestation	Jones, Vivien, M.A.	<input type="checkbox"/>
Manifestation of expression	<i>Pride and prejudice</i> . T. Egerton. 1813. Volume	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Text. French	<input type="checkbox"/>
Expression of work	Austen, Jane, 1775-1817. <i>Pride and prejudice</i> . Two-dimensional moving image	<input type="checkbox"/>
Related work	Bridget Jones's diary (Motion picture : 2001)	<input type="checkbox"/>
Related work	Grahame-Smith, Seth. <i>Pride and prejudice and zombies</i>	<input type="checkbox"/>
Related work	James, P. D. <i>Death comes to Pemberley</i>	<input type="checkbox"/>

Figure 10: R-tree for *Pride and Prejudice*, Text – English manifestation displayed.

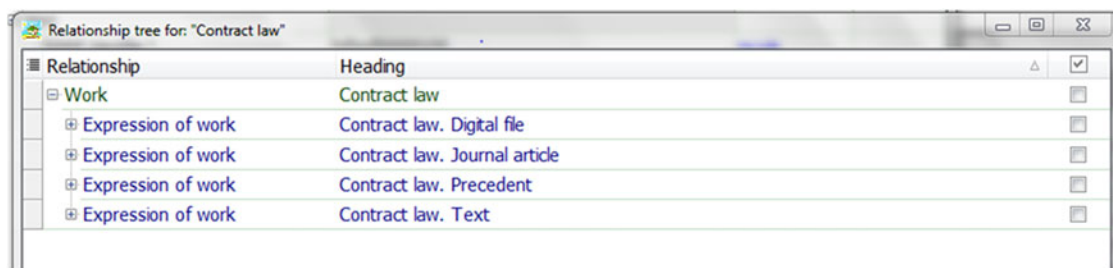


Figure 11: R-tree for contract law resources, Work level only.

CAN'T WE IGNORE ALL THIS?

It is very tempting for law libraries to simply ignore all of these changes and keep going as they were before. However, this is a false position to be in and it is pointless to deny that changes such as linked data, visual hierarchy and making relationships explicit are relevant. In fact, the changes are already making themselves felt.

Take for example, Westlaw. There is an expectation that things here are clickable, linked together, joined up. Once I have searched for a case analysis document for a particular case, I can click through to full-text law reports, pieces of legislation, other case reports, as well as journal articles and books. I do not have to go into a different tab or a different part of the database and search again. In fact, I **expect** to be able to click through to related content, rather than running an entirely new search. Lexis works along the same principles. I can access e-book materials from a case report by clicking the 'find related commentary' link – I do not need to run a separate search on the e-books. If I am reading a judgment which refers to an earlier case, I simply click on the hyperlinked case name. There is an existing relationship between the

cases (the latter case uses the earlier case as a precedent) and we are utilising that to move between the records.

Other vendors are starting to move into this sphere. Justis have recently launched JustisOne which takes this idea of linked relationships further in their "Precedent Map", which displays information about related cases in a visual format. A more important case is represented by a larger circle on the map, and coloured arrows are used to link the cases together (red for negative judicial treatment, yellow for neutral, green for positive treatment). Thus the 'hierarchy' of the cases is represented visually and the pre-existing relationships between cases are utilised to build useable connections.

Thirdly, Knowledge management are already starting to implement linked-data although they are coming at it from a tech perspective rather than a bibliographic perspective. To take one example, there is a knowledge management system called Recommend, which will trawl various web-sites/databases, transform the data it finds and display it to end users. The data gathered includes people, events, matters, and documents. Again, it is not fully clickable and so not fully linked up but we are starting to see a move towards this form of database, where additional

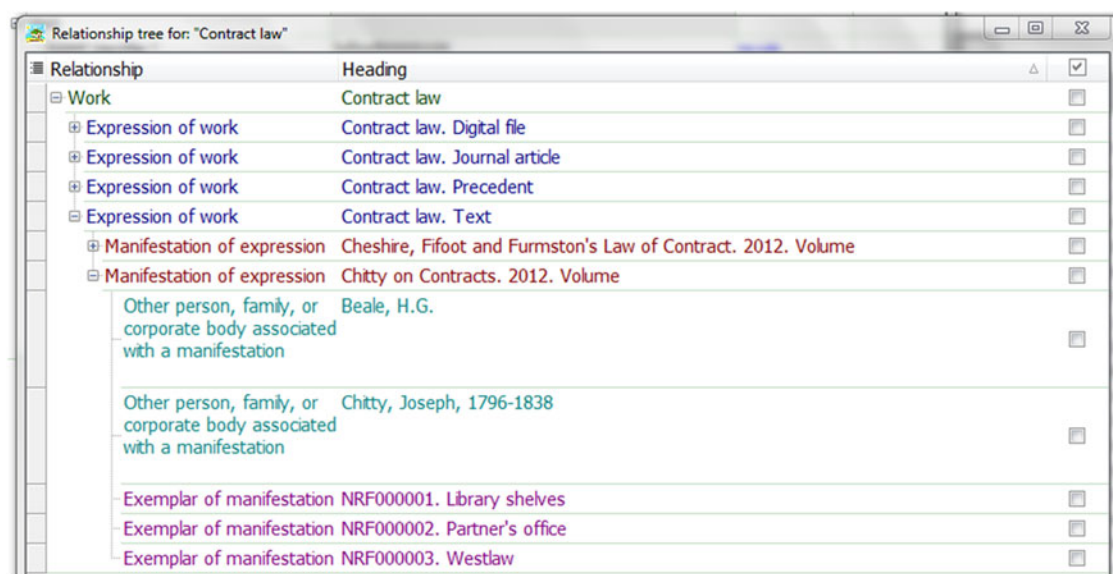


Figure 12: R-tree for contract law resources, displaying Text Expression level.

information is added to records (e.g. records for people and matter information is added to records for documents) in order to improve the discoverability of information.

So there is a growing awareness among knowledge providers that linked-data is the way forward. At present, however, there is little hierarchical structure to this. Librarians have skills, theory and understanding that we could bring to this type of project, but the work goes to Knowhow staff and IT. Either we are not being consulted, or we do not know that we could be involved – we do not know the right questions to ask. There are also significant cost implications in these projects, with knowledge providers charging hefty sums for their technology. There is a space here for librarians to get involved and indeed, I would argue that we need to get involved (and get our collections involved) in order to stay relevant. If we can work along the principles of linked data for legal materials (Westlaw, Lexis, JustisOne) and Knowhow (Recommind), why not library resources? The theory is in place, and the technology is beginning to come through.

The FRBR model puts the **user** firmly in control. It gives the user the tools to use the catalogue for the **discovery** of resources, rather than simple identification.

That in turn gives a whole new meaning and lease of life to the catalogue – no longer simply a repository of records, it is now the vehicle for a user to journey through the collection and the resources on offer. There is real potential here to do something different and new, but if information professionals do not know about these developments or are not aware of them, the chance is going to pass us by. At the moment, it appears that hardly anyone is having these discussions or is aware of the opportunities involved. Other companies are beginning to pick up on these opportunities, and that leaves us, as legal information professionals, out of the conversation.

So let's get involved! By engaging with the discussions around these new methods and ways of thinking, we could be at the forefront of new trends in librarianship, adding our expertise to that of our colleagues in knowledge management and technology. Let's get talking to colleagues in other sectors of the profession. Let's find out what they are working on, and start thinking about how it might work for us. Let's start having conversations around cataloguing and future technologies, and decide what our contribution to that is going to be.

Footnotes

¹ IFLA 1998: Functional Requirements for Bibliographic Records, Final Report. Accessed from <http://archive.ifa.org/VII/s13/frbr/frbr1.htm> on 18/09/2015.

² *Pride and Prejudice* was chosen as an example due to the success of the first so-called 'Jane-athon' held on January 30, 2015 at the ALA MidWinter Conference in Chicago, USA – a hackathon where librarians attempted to create RDA data from scratch using the works of Jane Austen as the subject matter. See <<http://www.rdatoolkit.org/janein>> for further information.

³ IFLA Final report, *ibid*, section 3.2.1.

⁴ IFLA Final Report, *ibid*, section 3.2.2.

⁵ IFLA Final Report, *ibid*, section 3.2.3.

⁶ IFLA Final Report, *ibid*, section 3.2.4.

⁷ <http://www.marcofquality.com/wiki/rimmf/doku.php>. Accessed on 18/09/2015.

Biography

Helen Doyle obtained her undergraduate degree in Classics from Cambridge University in 2008 before working as a graduate trainee at Lincoln's Inn. She then received an MA in Librarianship and Information Studies from UCL in September 2011, whilst undertaking Library Assistant work at Inner Temple. She joined the Library and Information Services team at Norton Rose Fulbright as an Information Officer in March 2013. Helen discovered a passion for cataloguing whilst studying for her MA and chose to take the optional Advanced Cataloguing module. She wrote her dissertation on the cataloguing of theatre programmes, which included a discussion of cataloguing theory and four case studies on differing cataloguing practices. In January 2013 she became Treasurer of CILIP's Catalogue & Index Group and is now heavily involved with the Group's events, most recently co-presenting a joint CIG/BIALL training session on cataloguing for non-cataloguers, and helping to organise CIG's biannual conference.