Rules for the recording of bibliographic data in Bibliographic Record Schema (BRS)

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Glossary

BRS Bibliographic Record Schema

Citable An entity that may be described in a bibliographic citation.

Event An entity that is any form of event.

FOAF The Friend of a Friend Project [1]

IDENTIFIER An indication, in this document, that an identifier for a particular entity is required.

MARC Relator A type of contributor to the material of a Citable.

Property A fact that may be used to describe a particular subject.

RDF Resource Description Framework

Responsible Actor An entity that is in some way responsible for a Citable.

XML Namespaces Provide means for adding the contextual meaning to a property name in an XML syntax, and thus remove any ambiguity from that name.

1 Introduction

Bibliographic Record Schema (BRS) is an RDF based data model for bibliographic data. Using the RDF/XML construct of RDF, this document is a description of the rules and properties for creating a set of bibliographic records within BRS. A set of examples has been included to show some of the more common bibliographic record types.

2 Underlying XML Technologies

2.1 Conventions within the document

The convention in this document is to specify properties in the form they would appear in the XML tags of an RDF/XML syntax. Where there are attributes required within an XML element start tag these are represented inside angle brackets. For all other properties the angle brackets have been omitted. Where a recorded entity is to be given a unique identifier within a BRS document the convention in this document is to use the term 'IDENTIFIER' which should be replaced by an identifier for the particular recorded entity.

2.2 XML Namespaces

One of the most important XML features that the RDF/XML syntax of BRS makes use of is Namespaces. It is likely that a property, represented by the element name, for a resource will be mirrored by a property of the same name defined elsewhere. Namespaces provide means for adding the contextual meaning to a property name, and thus remove any ambiguity from that name.

The following XML Namespaces are used in the creation of bibliographic records using BRS to specify that the semantic meaning of the property is defined at the Uniform Resource Identifier given in the root node [see Section 3.1]:

- A property with the namespace 'rdf:' is semantically defined by the schema at http: //www.w3.org/1999/02/22-rdf-syntax-ns#.
- A property with the namespace 'dc:' is a Dublin Core element [2] described by the schema at http://purl.org/dc/elements/1.1/.

- A property with the namespace 'dcterms:' is a Dublin Core Qualifier [3] semantically defined by the schema at http://purl.org/dc/terms/
- A property with the namespace 'foaf:' is a property used by the FOAF community [4] semantically defined by the schema at http://xmlns.com/foaf/1.0/
- A property with the namespace 'marcrel:' specifies a specific type of contirbutor to the material of a Citable [5]. The properties are defined in the schema at http://dublincore.org/2000/03/13-marcrel.
- A property with the namespace 'bib:' is a property that is used in the bibliographic description of a citable object and is semantically defined by the schema at http://www.macs.hw.ac.uk/~ceerdl/Dissertation/bib/.
- A property with the namespace 'name:' is a property that is used to describe the name of a person and is semantically defined by the schema at http://www.macs.hw.ac.uk/ ~ceerdl/Dissertation/name/.

2.3 XML Overview

BRS is based on RDF. It will be described in this document using the RDF/XML syntax which is governed by the rules of XML [6]:

• The document should begin with the XML declaration line.

```
<?xml version="1.0" ?>
```

• A root element is required.

An XML document must contain a root element that contains all other elements. In RDF/XML this is the rdf:RDF element.

• Closing tags are required.

Every element must have a closing tag. For empty elements this maybe an opening tag with a slash before the end, $\langle \dots \rangle >$ [see figure 1].

Elements must be properly nested.
If a separate element is opened before an element is closed, this element must be closed first, <a>.......

• XML is case sensitive.

A tag $\langle a \rangle$ is not equivalent to the tag $\langle A \rangle$.

• Attribute values must be enclosed in quotation marks.

Where an attribute is included within a tag, its value must be enclosed in single or double quotation marks, <tag attribute="VALUE"> [see figure 1].

• The XML namespace pointing to the description of a property is given in the form <Namespace:Property >.



Figure 1: XML tag rules

3 The Rules of BRS

Bibliographic data is modelled in BRS using two main types of entity: the 'Citable' (the piece of text or other such medium being cited) and a 'Responsible Actor' (a person, organisation or other agent responsible in some way for the Citable). A Citable can be related to any other Citable, for example a book (Citable) can be part of a series (Citable), allowing complete nesting of documents and the inheritance of some bibliographic data and, in particular, publication details. A third entity, 'Event', should be used to represent events, such as conferences. One may wish to reference the actual event and/or the published proceedings of the event. which may have completely different data to that of the event. A relationship between these two entities is therefore possible.

Within the main entities there are further entities that represent secondary items, such as person names and publishing details, that specify a group of properties that together describe one aspect of the entity. Using the full power of RDF it is possible to treat them separately from the resource. However, this practice is not recommended and is therefore not described here. These should usually be nested within the main entity.

Each description of an entity should be given a unique identifier using the rdf:about="#IDENTIFIER" attribute in the main entity node, for example

<bib:Citable rdf:about="#IDENTIFIER"> and <foaf:Person rdf:about="#IDENTIFIER">.
The hash symbol '#' indicates that the resource is part of the current document and can be
referenced from within the document using the attribute rdf:Resource="#IDENTIFIER" within
an empty property element. Referencing a record in a separate file can be done by giving the
full URI of the file with the #IDENTIFIER appended in the rdf:Resource' attribute. Absolute
URLs may also be used.

The following sections describe the properties that may be used and the rules on how they should be used to create bibliographic records in BRS. Section 3.1 describes the elements that are required in all data files containing BRS data; Section 3.2 describes the properties and rules that may be used for describing a Citable entity; Section 3.3 describes the properties and rules that may be used to describe a responsible actor entity; and Section 3.4 describes the properties that may be used for describing an event entity.

3.1 BRS Mantra

This section describes items that should be included in the a BRS document without the need to understand why there is the need for them; the BRS 'Mantra'. This includes XML declaration line and the RDF root node that is required in all data files containing bibliographic content in the BRS data model.

As BRS is RDF based, in using the RDF/XML syntax, the first line of a document is the declaration of the XML version being used [figure 2].

Figure 2: XML declaration line

The root node of a BRS document (of file type '.rdf') is the RDF element [figure 3] and is used to enclose all bibliographic content. A root node is not required for every bibliographic record, as many such records may be nested within a single root node. Contained in the attributes of the RDF element is a listing of the Namespaces that identify the location of the schema that defines each element in the vocabulary. While these Namespaces may be changed for a local context this is not recommended as it will impact on the interoperability and shareability of the data.

```
<rdf:RDF
```

```
xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns:dc="http://purl.org/dc/elements/1.1/"
xmlns:dcterms="http://purl.org/dc/terms/"
xmlns:foaf="http://xmlns.com/foaf/0.1/"
xmlns:marcrel="http://dublincore.org/2000/03/13-marcrel"
xmlns:bib="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/bib/"
xmlns:name="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/name/">
```

</rdf:RDF>

Figure 3: RDF root node.

3.2 Citable Entities

The properties described here may be used, wherever required, in the description of any Citable.

- Every bibliographic record describes a citable object and as such is described as being of type bib:Citable and is given a IDENTIFIER similar to that of a BibTeX identifier¹ as an attribute of bib:Citable using rdf:about="#IDENTIFIER".
- 2. A dc:title should always be included for a Citable except where there is a relation to another citable and the two titles are the same in which case the title is infered from the related object

¹The creators surname and the date in the Harvard format for bibliographic references is generally enough to create an identifier. However, more detail may be required to make the identifier truly unique.

- 3. A bib:abbrevTitle property can be included in a description of a Citable wherever dc:title can be used. It is recommended to only use an abbreviation when there is a full title present however there maybe situations where only an abbreviation of a title is available. [See Example A.2, line 29.]
- 4. A dcterms:alternative property can be used to specify an alternative or substitute title for the Citable. This can only be included in the description when a dc:title property is present.
- 5. A contributor of material (author, creator, composer, dissertant etc.) to the Citable should use the approriate MARC relator (type of contributor) code in the form marcrel:CODE where CODE is the appropriate three letter code assigned to a relator. [See Section 4 for a subset of the MARC relator list.] Where one cannot determine the specific role of a contributor the super property dc:contributor or the relator marcrel:cre (Creator) should be used. It is recommended that the MARC relator be linked to the description of the responsible actor using the form <marcrel:CODE rdf:Resource="#IDENTIFIER" />. [See Example A.1, line 14.]
- 6. Where there is more than one contributor it is recommended to maintain the order of the list, that the list identifier <bib:contributors rdf:parseType="Resource"> be used with the MARC relators nested within rdf:li properties. [See Example A.2, lines 15-18.]
- 7. A Citable can be given a textual description using dc:description or the more semantically specific dcterms:abstract or foaf:depicts (limited to images/graphics/animations and other visual Citables).
- 8. A Citable can be published in many forms and places. Each publication should be nested in the secondary entity <bib:pub_details rdf:parseType="Resource">>. (It should be noted that any publication on the World Wide Web should be treated as separate publications as they may be in different formats, on different mediums or have different publication details.) [See Example A.3, lines 16–24.] Where there is only a single publication of the Citable this may be omitted and the properties described below used simply in the description the Citable. In this case it is infered that the properties make one set

of publication details. This is not, however, recommended as corruption of the data may occur.

- 9. Within the description of a Citable's publication any of the following properties may or may not be used:
 - (a) dc:publisher to specify the publisher of the Citable. It is recommended that this be linked to the responsible actor description in the form
 <dc:publisher rdf:Resource="#IDENTIFIER" />.
 - (b) dcterms:issued to describe the date of publication in the form set out in ISO 8601 [YYYY, YYYY-MM or YYYY-MM-DD].
 - (c) **bib:edition** describes the edition in the form of a non-negative integer.
 - (d) dc:identifier to give a string that uniquely identifies the publication. This should not be used for an ISBN or ISSN.
 - (e) bib:isbn to give the International Standard Book Number, a 10 digit non-negative integer that uniquely identifies a book.
 - (f) bib:issn to give the International Standard Serial Number, an 8 digit non-negative integer that uniquely identifies a serial publication.
 - (g) dc:format to give a textual description of the format of a source
 - (h) dcterms:medium to give a textual description of the medium used in the publication of a Citable.
 - (i) bib:url to give the Uniform Resource Locator of an online electronic publication.
 - (j) bib:accessed to specify the date that an online Citable was accessed in the form set out in ISO 8601 [YYYY, YYYY-MM or YYYY-MM-DD]. Due to the nature of the World Wide Web, this should accompany any URL property.
 - (k) bib:location to give a textual description of the location of the Citable particularly when it is rare, unpublished, or only available from a particular responsible actor. Where a Citable is available from a particular responsible actor they can be linked using the form <bib:location rdf:Resource="#IDENTIFIER" />
 - (l) Where a Citable, C1, is part of another, C2, C1 can inherit the publication details of C2. The relation <dcterms:isPartOf rdf:parseType="Resource"> can be used,

nested within the publications details. Nested within this, the following properties, that describe how C1 is part of C2, may or may not be used:

- i. <bib:relatedCitable rdf:Resource="#IDENTIFIER" /> to link to the record describing C2.
- ii. bib:volume to use a non-negative integer to specify the particular volume of the related Citable.
- iii. bib:number to use a non-negative integer to specify the particular number of the related Citable.
- iv. bib:version to specify the particular version of the related Citable.
- v. bib:status a textual description of the status of the relationship between C1 and C2, for example "to Appear".
- vi. bib:startPage to use a non-negative integer to specify the start of a range of pages. This must be accompanied by a bib:endPage property.
- vii. bib:endPage to use a non-negative integer to specify the end of a page range. This must be accompanied by a bib:startPage property.
- viii. bib:page to use a non-negative integer to specify a single page. This may accompany a range of pages and/or appear several times to specify that a Citable appears on several non-linear pages.

[See Example A.3, lines 35–40.]

- 10. There are various ways in which a Citable, C1, can be related to another, C2 such that there would be no inheritance of specific publishing details. The default relation is <dc:relation rdf:Resource="#IDENTIFIER" />. Semantic refinements of this may be used in the place of dc:relation:
 - (a) dcterms:replaces to specify that C1 replaces C2.
 - (b) dcterms:isReplacedBy to specify that C1 is replaced by C2.
 - (c) dcterms:isVersionOf to specify that C1 is a version of C2. Semantic refinements may also be used to provide a more specific version information:
 - i. bib:isAdaptationOf
 - ii. bib:isReproductionOf

- iii. bib:isRevisionOf
- iv. bib:isArrangementOf
- v. bib:isExtendedVersionOf an extended or long version.
- vi. bib:isShortVersionOf a short or abridged version.
- vii. bib:isFullVersionOf a full or complete version.
- (d) bib:isContinuationOf to specify that C1 is a continuation of or a sequel to C2.
- (e) bib:isTranslationOf to specify that C1 is in a different language to the (original) C2.
- (f) bib:isSummaryOf to specify that C1 summarises C2.
- 11. The relationship between the published proceedings of an event and the event entity should be specified using <bib:isProceedingsOf rdf:Resource="#IDENTIFIER" />. [See Example A.3, line 31.]
- 12. Where a Citable conforms to a specific set of rules or standard the property dcterms:comformsTo can be used.
- 13. A note or comment to be included in any citation using the BRS record can be placed at any point in a Citble using the property bib:note.
- 14. A comment for a human reader of the BRS data file may be included using the property **bib:comment**. It is intended that this comment be ignored by any machine processing the data file.

3.3 Responsible Actors

The properties described here may be used, wherever required to describe an actor that is in some way responsible for a Citable.

- 1. A responsible actor may be one of the following types:
 - (a) foaf:person A person.
 - (b) foaf:organisation An organisation.
 - (c) **bib:institution** An organization or public body founded for a special purpose especially for a charitable or educational purpose or as a hospital.

- (d) foaf:group A group.
- (e) foaf:agent An actor that doesn't fit into the above groups.
- 2. Properties that may be used to describe any type of responsible actor are:
 - (a) foaf:homepage to specify a URL that points to the homepage of the responsible actor.
 - (b) foaf:mbox to specify the electronic mailbox of the responsible actor.
 - (c) bib:address to give a single string description of the address of a responsible actor.
- 3. Properties specific to a description of a responsible actor of the type foaf:Person:
 - (a) name:name [See Section 3.3.1 for details on person names.]
 - (b) foaf:name to give a single string representation of a persons name. This is not recommended as it may have adverse effects on the performance of any searching or sorting of the bibliographic records.
- 4. Properties that may be used specifically to describe responsible a actor of the type foaf:Group:
 - (a) **bib:grpName** to specify the group name in a single string format.
 - (b) <foaf:member rdf:Resource="#IDENTIFIER" /> to specify that a Person or organisation is a member of the group.
- 5. Properties that may be used specifcally to describe a responsible actor of the type foaf:Organization or bib:Institution:
 - (a) bib:orgName To specify the organisations name as a single string.
 - (b) bib:orgNumber To specify the identifying number of a registered organisation.

It is possible, using the power of BRS' RDF base, for a Responsible Actor to be nested within the Citable entity for which the actor is responsible. [See Example A.3, lines 67–72.]

3.3.1 Person Names

To describe the name of a person a sorted list of components nested within the list identifier <name:name rdf:parseType="Resource"> is recommended. Each name component should be given in the order specific to the culture of the person being described nested within rdf:li elements in the form <rdf:li><name:Component rdf:value="NAME" /></rdf:li>. [See Example A.1, 39-42 and Example A.3, lines 57-62.]

This format is based on the work of Morten Frederiksen in his proposal to the FOAF community [7]. The schema developed for the proposal sets out the properties used in the description of a person's name as part of the FOAF Vocabulary. However, these are yet to be accepted into the vocabulary by the FOAF community. Therefore, I have created a schema for describing the name of a person using Frederiksen's proposed format, along with some additional properties, that is distinct from the proposal to FOAF. I recognise that this is an incomplete solution to the problems surrounding the data modelling of multi-cultural personal names. Thus, the Person Name schema and model is separate from that for the properties that describe Citables, using the Namespace 'name:'. This allows for the replacement of the structure with any new format for personal names that is more complete or more correct.

The following name components can be used ≥ 0 times in the required order:

- 1. name:Articular The part of a name that joins components together. This is generally preceded by a family, clan, surname, matronymic or patronymic name.
- 2. name:Baptismal The name given to a person in Baptism.
- 3. name:Clan The name of the Clan that a person is a member of.
- 4. name:Dynastic An addition to a name that relates to a dynasty or a generatonal identifier (IV, X, Jr.).
- 5. name: Educational An addition to a name that identifies the person's academic status.
- 6. name:Family The name of the family that a person is a member of. (This is equivalent to name:Surname.)
- 7. name:Given A name that was given to a person.
- 8. name: HonorificTitle A title that bestows respect.

- 9. name:Maiden A female person's surname, family or clan name prior to marriage.
- 10. name:Matronymic A name related to or derived from the name of mother or maternal ancestor.
- 11. name:Patronymic A name related to or derived from the name of father or paternal ancestor.
- 12. name:PrimaryGiven A given name by which the person is generally known. This is generally the first name in a Western Culture or a preffered name.
- 13. name:ProfessionalTitle A title that indicates the professional status of the person.
- 14. name:Religious A name based in religion or religious-based tradition.
- 15. name:SecondaryGiven A given name by which the person is not normally known. This may be a middle or non-preferred name.
- 16. name:SexIndicator A name component that indicates the gender of a person.
- 17. name:Suffix A general addition to a persons name.
- 18. name:Surname The name used to identify the members of a family. (This is equivalent to name:Family.)
- 19. name:Title An identifying appellation signifying status or function

3.4 Events

An event can be described using any appropriate properties that may be used to describe a Citable and the following properties:

- bib:startDate To specify the date that an event began in the form set out in ISO 8601 [YYYY, YYYY-MM or YYYY-MM-DD].
- bib:endDate To specify the date that an event ended in the form set out in ISO 8601 [YYYY, YYYY-MM or YYYY-MM-DD].
- 3. bib:eventLocation To specify the location of the event.

4 MARC Relators

The Library of Congress (the research arm of the U.S. Congress) has created an extensive list of relators (types of contributor) for the MAchine-Readable Cataloging (MARC) system [5]. The list defines over 500 relators with a specific three letter code and description. In conjunction with the Dublin Core Metadata Initiative these have been converted into an RDF schema with each one described as a sub-property of dc:contributor. This ensures that any MARC Relator is a specific type of contributor of material towards a Citable.

The convention is to use marcrel as the Namespace for the list and the relevant three letter code as the element name within the RDF/XML syntax.

The following list is a subset of 30 members of the full MARC Relator list that are more likely to be used with the descriptions taken verbatim from the RDF schema and relator list [5]. The full list can be found at. http://www.loc.gov/marc/relators/relaterm.html.²

1. marcrel:adp (Adapter)

use for a person who 1) reworks a musical composition, usually for a different medium, or 2) rewrites novels or stories for motion pictures or other audiovisual medium.

2. marcrel:ann (Annotator)

Use for a person who writes manuscript annotations on a printed item.

3. marcrel:arr (Arranger)

Use for a person who transcribes a musical composition, usually for a different medium from that of the original; in an arrangement the musical substance remains essentially unchanged.

4. marcrel:art (Artist)

Use for a person (e.g., a painter) who conceives, and perhaps also implements, an original graphic design or work of art. For book illustrators, prefer Illustrator [marcrel:ill].

5. marcrel:att (Attributed Name)

²The list is alphabetical and as such in the order in which they appear in the full list. For clarity they have been given a numerical value that serves to only give this list a formal ordering and are not a number assigned by the LoC or Dublin Core. Within the list, the prefix 'marcrel:' has been added to the three letter code assigned by the LoC as this is the convention for use within BRS, with 'marcrel' being the XML Namespace for the Relator properties.

Use to relate an author, artist, etc. to a work for which there is or once was substantial authority for designating that person as author, creator, etc. of the work.

6. marcrel:aut (Author)

Use for a person or corporate body chiefly responsible for the intellectual or artistic content of a work, usually printed text. This term may also be used when more than one person or body bears such responsibility.

7. marcrel:aqt (Author in quotations or text extracts)

Use for a person whose work is largely quoted or extracted in works to which he or she did not contribute directly. Such quotations are found particularly in exhibition catalogs, collections of photographs, etc.

8. marcrel:aft (Author of afterword, colophon, etc.)

Use for a person or corporate body responsible for an afterword, postface, colophon, etc. but who is not the chief author of a work.

9. marcrel:aud (Author of dialog)

Use for a person or corporate body responsible for the dialog or spoken commentary for a screenplay or sound recording.

10. marcrel:aui (Author of introduction)

Use for a person or corporate body responsible for an introduction, preface, foreword, or other critical introductory matter, but who is not the chief author.

11. marcrel:aus (Author of screenplay)

Use for a person or corporate body responsible for a motion picture screenplay, dialog, spoken commentary, etc.

12. marcrel:ant (Bibliographic antecedent)

Use for the author responsible for a work upon which the work represented by the catalog record is based. This may be appropriate for adaptations, sequels, continuations, indexes, etc.

13. marcrel:ctg (Cartographer)

Use for a person responsible for the creation of maps and other cartographic materials.

14. marcrel:cns (Censor)

Use for a censor, bowdlerizer, expurgator, etc., official or private.

15. marcrel:chr (Choreographer)

Use for a person who composes or arranges dances or other movements (e.g., "master of swords") for a musical or dramatic presentation or entertainment.

16. marcrel:cmm (Commentator)

Use for a person who provides interpretation, analysis, or a discussion of the subject matter on a recording, motion picture, or other audiovisual medium.

17. marcrel:com (Compiler)

Use for a person who produces a work or publication by selecting and putting together material from the works of various persons or bodies.

18. marcrel:cmp (Composer)

Use for a person who creates a musical work, usually a piece of music in manuscript or printed form.

19. marcrel:drt (Director)

Use for a person who is responsible for the general management of a work or who supervises the production of a performance for stage, screen, or sound recording.

20. marcrel:dis (Dissertant)

Use for a person who presents a thesis for a university or higher-level educational degree.

21. marcrel:edt (Editor)

Use for a person who prepares for publication a work not primarily his/her own, such as by elucidating text, adding introductory or other critical matter, or technically directing an editorial staff.

22. marcrel:ill (Illustrator)

Use for the person who conceives, and perhaps also implements, a design or illustration, usually to accompany a written text.

23. marcrel:lyr (lyricist)

Use for the writer of the text of a song.

24. marcrel:mus (Musician)

Use for the person who performs music or contributes to the musical content of a work when it is not possible or desirable to identify the function more precisely.

25. marcrel:nrt (Narrator)

Use for the speaker who relates the particulars of an act, occurrence, or course of events.

26. marcrel:pht (Photographer)

Use for the person or organization responsible for taking photographs, whether they are used in their original form or as reproductions.

27. marcrel:pro (Producer)

Use for a person who is responsible for the making of a motion picture, including business aspects, management of the productions, and the commercial success of the work.

28. marcrel:prg (Programmer)

Use for a person or corporate body responsible for the creation and/or maintenance of computer program design documents, source code, and machine-executable digital files and supporting documentation.

29. marcrel:rpt (Reporter)

Use for a person who writes or presents reports of news or current events on air or in print.

30. marcrel:trl (Translator)

Use for a person who renders a text from one language into another, or from an older form of a language into the modern form.

A Examples

This appendix provides a set of examples of bibliographic records in BRS.

A.1 A Book

The book in this example has the properties:

- Title "Practical RDF"
- Author "Shelley Powers"
- Publisher "O'Reilly and Associates, Inc; Sebastopol, CA, 95472, US"
- Date of Issue "July 2003"
- Edition "first"
- ISBN "0596002637"
- Abstract "The abstract"

This is the bibliographic record of the book encoded in BRS.

```
1
    <?xml version="1.0" ?>
 2
3
    <rdf:RDF
       xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
4
       xmlns:dc="http://purl.org/dc/elements/1.1/"
5
       xmlns:dcterms="http://purl.org/dc/terms/"
6
       xmlns:foaf="http://xmlns.com/foaf/0.1/"
 7
       xmlns:marcrel="http://dublincore.org/2000/03/13-marcrel"
8
       xmlns:bib="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/bib/"
9
10
       xmlns:name="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/name/">
11
12
    <bib:Citable rdf:about="#Powers_2003">
13
         <dc:title>Practical RDF</dc:title>
         <marcrel:aut rdf:Resource="#powers" />
14
         <bib:pub_details rdf:parseType="Resource">
15
             <dc:publisher rdf:Resource="#oreilly" />
16
             <dcterms:issued>2003-07</dcterms:issued>
17
             <bib:edition>1</bib:edition>
18
             <bib:isbn>0596002637</bib:isbn>
19
20
         </bib:pub_details>
         <dcterms:abstract>*An abstract may go here!*</dcterms:abstract>
21
22
    </bib:Citable>
23
    <foaf:Person rdf:about="#powers">
24
25
         <name:name rdf:parseType="Resource">
26
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27
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28
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    </foaf:Person>
29
30
31
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         <bib:orgName>O'Reilly and Associates, Inc</bib:orgName>
32
33
         <bib:address>Sebastopol, CA, 95472, US</bib:address>
34
    </foaf:Organization>
35
36
    </rdf:RDF>
```

A.2 A Journal Article

The journal article in this example has the properties:

- Title "Linearization of the lambda-calculus and Its Relation with Intersection Type Systems"
- Authors "Mário Florido" and "Luís Damas"
- Journal "Journal of Functional Programming (J. Func. Programming)"
- Journal Publisher "Cambridge University Press"
- Status "To appear"

This is the bibliographic record of the article encoded in BRS.

```
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 2
3
    <rdf:RDF
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4
       xmlns:dc="http://purl.org/dc/elements/1.1/"
5
       xmlns:dcterms="http://purl.org/dc/terms/"
 6
       xmlns:foaf="http://xmlns.com/foaf/0.1/"
 7
8
       xmlns:marcrel="http://dublincore.org/2000/03/13-marcrel"
       xmlns:bib="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/bib/"
9
       xmlns:name="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/name/">
10
11
     <bib:Citable rdf:about="#Flo+Dam:JFP-ta">
12
13
         <dc:title>Linearization of the lambda-calculus and Its Relation
                   with Intersection Type Systems</dc:title>
14
         <bib:contributors rdf:parseType="Resource">
15
16
             <rdf:li><marcrel:aut rdf:Resource="#Florido" /></rdf:li>
             <rdf:li><marcrel:aut rdf:Resource="#Damas" /></rdf:li>
17
         </bib:contributors>
18
         <bib:pub_details rdf:parseType="Resource">
19
           <dcterms:isPartOf rdf:parseType="Resource">
20
21
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              <bib:status>To appear</bib:status>
22
23
           </dcterms:isPartOf>
24
         </bib:pub_details>
    </bib:Citable>
25
26
27
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28
         <dc:title>Journal of Functional Programming</dc:title>
29
         <bib:abbrevTitle>J. Funct. Programming</bib:abbrevTitle>
         <dc:publisher rdf:Resource="#CUP" />
30
     </bib:Citable>
31
32
```

```
33
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34
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35
         <bib:orgName>CUP</bib:orgName>
36
    </foaf:Organization>
37
38
    <foaf:Person rdf:about="#Florido">
39
         <name:name rdf:parseType="Resource">
40
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41
             <rdf:li><name:family rdf:value="Florido" /></rdf:li>
42
         </name:name>
    </foaf:Person>
43
44
45
    <foaf:Person rdf:about="#Damas">
         <name:name rdf:parseType="Resource">
46
             <rdf:li><name:given rdf:value="Luis" /></rdf:li>
47
             <rdf:li><name:family rdf:value="Damas" /></rdf:li>
48
49
         </name:name>
50
    </foaf:Person>
51
52
    </rdf:RDF>
```

A.3 An Article in the Proceedings of a Conference

The article in the proceedings of a conference has the properties:

- Title "Polar Type Inference with Intersection Types and Ω "
- Author "Sébastien Carlier"
- Publication at URL "http://www.macs.hw.ac.uk/sebc/carlier-ptiio.ps.gz"
- Medium of Publication at the URL "postscript"
- Book Title "Proceedings of the 2nd Workshop on Intersection Types and Related Systems"
- Book Editor "Steffen van Bakel"
- Book ISBN "04444514074"
- Date of Issue "2002"
- Series Title "Electronic Notes in Theoretical Computer Science"
- Series Publisher "Elsevier"
- Series URL "http://www.elsevier.nl/locate/entcs/volume70.html"
- Volume "70"
- Number "1"
- Conference Title "2nd Workshop on Intersection Types and Related Systems"
- Conference Date "26 July 2002"

This is the bibliographic record of the article encoded in BRS.

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5
       xmlns:dcterms="http://purl.org/dc/terms/"
6
       xmlns:foaf="http://xmlns.com/foaf/0.1/"
 7
       xmlns:marcrel="http://dublincore.org/2000/03/13-marcrel"
8
9
       xmlns:bib="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/bib/"
10
       xmlns:name="http://www.macs.hw.ac.uk/~ceerdl/www/Dissertation/name/">
11
12
    <bib:Citable rdf:about="Carlier:ITRS-2002">
13
         <dc:title>Polar Type Inference with Intersection Types and ?</dc:title>
         <marcrel:aut rdf:resource="#Carlier" />
14
         <dcterms:abstract>**********</dcterms:abstract>
15
         <bib:pub_details rdf:parseType="Resource">
16
17
           <dcterms:isPartOf rdf:parseType="Resource">
               <bib:relatedCitable rdf:Resource="#procITRS-2002" />
18
19
           </dcterms:isPartOf>
         </bib:pub_details>
20
21
         <bib:pub_details rdf:parseType="Resource">
22
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23
             <bib:url>http://www.macs.hw.ac.uk/~sebc/carlier-ptiio.ps.gz</bib:url>
24
         </bib:pub_details>
25
    </bib:Citable>
26
27
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28
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29
30
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32
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33
34
            <dc:issued>2002</dc:issued>
35
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              <bib:relatedCitable rdf:Resource="#ENTCS" />
36
37
              <bib:volume>70</bib:volume>
38
              <bib:issue>1</bib:issue>
              <bib:url>http://www.elsevier.nl/locate/entcs/volume70.html</bib:url>
39
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40
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41
42
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43
44
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45
```

```
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47
    </bib:Event>
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52
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53
         </name:name>
54
    </foaf:Person>
55
    <foaf:Person rdf:about="#vanBakel">
56
         <name:name rdf:parseType="Resource">
57
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58
             <rdf:li><name:secondaryGiven rdf:value="J." /></rdf:li>
59
             <rdf:li><name:articular rdf:value="van" /></rdf:li>
60
61
             <rdf:li><name:family rdf:value="Bakel" /></rdf:li>
62
         </name:name>
63
    </foaf:Person>
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65
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66
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67
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68
69
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70
           </foaf:Organization>
71
72
         </dc:publisher>
    </bib:Citable>
73
74
    </rdf:RDF>
75
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References

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- [7] Morten Frederiksen. Names in FoaF. http://rdfweb.org/topic/NamesInFoaf, July 2003. This is a constantly updated WIKI page, Accessed March 2004, Originally published at http://www.wasab.dk/morten/2003/04/foaf-names-proposal-1.html.