Crosswalks, mapping tables, and normalisation rules: when we don’t even share the same vocabulary for authority control

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New Zealand’s specialist land-based university
Our research systems
(simplified overview)

- Local bibliographic data *(DSpace, Research Master)*
- Vendor bibliographic data
- Local personnel data *(PeopleSoft)*

Initial import

- Manual thesis records
- Research Information Management System *(Elements)*

- Institutional Repository *(DSpace)*

- Heritage items
- Teaching materials
- Library resources
- Website content

- Public researcher profiles

- Library Discovery Layer *(Primo)*

- External aggregators *(OAIster, BASE, DigitalNZ)*

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Crosswalks
(aka transformations, normalization rules, etc)

```xml
<crosswalks:mappings for="dspace">
  <crosswalks:mapping dspace="dc.contributor.author" elements="authors" />

  <!-- ***** Authors' names ***** -->
  <!-- Bring names from entry feed but cross-reference against full feed for more detail -->
  <xsl:template match="pubs:people/pubs:person">
    <xsl:choose>
      <xsl:when test="/pubs:elements-user/@id">
        <xsl:variable name="id" select="/pubs:elements-user/@id"/>
        <xsl:variable name="lu_users" select="/.../.../.../pubs:users/pubs:user"/>
        <xsl:for-each select="$lu_users">
          <xsl:if test="/pubs:id[text()=$id]">
            <xsl:variable name="lastname" select="normalize-space(/pubs:last-name)"/>
            <xsl:variable name="firstname" select="/pubs:first-name"/>
            <xsl:variable name="initials" select="normalize-space(/pubs:initials)"/>
            <xsl:value-of select="$lastname"/>
          </xsl:if>
          <xsl:if test="($lastname='') and ($initials=' ' or $firstname='')">
            <xsl:text><!-- XXXX --> </xsl:text>
          </xsl:if>
        </xsl:for-each>
      </xsl:when>
    </xsl:choose>
  </xsl:template>
</crosswalks:mappings>
```
Crosswalks
(aka transformations, normalization rules, etc)
# Preferred data sources

(aka order of precedence, etc)

<table>
<thead>
<tr>
<th>Data sources</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CrossRef</td>
<td></td>
</tr>
<tr>
<td>Europe PubMed Central</td>
<td></td>
</tr>
<tr>
<td>Manual</td>
<td>Verified</td>
</tr>
<tr>
<td>PubMed</td>
<td></td>
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<tr>
<td>Scopus</td>
<td></td>
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</tbody>
</table>

**Article Title:**
Investigation into the binding domain of m-calpain using photoswitchable diazo- and triazene-dipeptide aldehydes: New anticataract agents

**Journal Title:**
Journal of Medicinal Chemistry

**Authors:**

**ISSN:**
0022-2623

**eISSN:**
1520-4804

**DOI:**
10.1021/jm061455n

**Status:**
Published
Preferred data sources (aka order of precedence, etc)

<table>
<thead>
<tr>
<th>Move Up</th>
<th>Move Down</th>
<th>Service value</th>
<th>Service type</th>
<th>Service name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Miscellaneous EJournals</td>
<td>Full Text</td>
<td>Electronic collection</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Nature</td>
<td>Full Text</td>
<td>Interface</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Highwire Press Journals</td>
<td>Full Text</td>
<td>Electronic collection</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Elsevier ScienceDirect Journals Complete</td>
<td>Full Text</td>
<td>Electronic collection</td>
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<tr>
<td>5</td>
<td></td>
<td>Emerald</td>
<td>Full Text</td>
<td>Interface</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>ProQuest New Platform</td>
<td>Full Text</td>
<td>Interface</td>
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<td></td>
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<td>Interface</td>
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<td>Interface</td>
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<td>Electronic collection</td>
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<td></td>
<td>CABI</td>
<td>Selected Full Text</td>
<td>Interface</td>
</tr>
</tbody>
</table>
## Mapping terms

(aka data dictionaries, mapping tables, etc)

<table>
<thead>
<tr>
<th>Original guidelines</th>
<th>Elements per DSpace.cfg</th>
<th>DSpace.cfg mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book</td>
<td>book</td>
<td>Book</td>
</tr>
<tr>
<td>Book Item</td>
<td>c-book-review</td>
<td>Book Review</td>
</tr>
<tr>
<td>Scholarly Text</td>
<td>scholarly-edition</td>
<td>Book Scholarly Edition</td>
</tr>
<tr>
<td>Conference Item</td>
<td>composition</td>
<td>Composition</td>
</tr>
<tr>
<td>Conference Paper</td>
<td>conference-proceeding</td>
<td>Conference Contribution - Paper in Published Proceedings</td>
</tr>
<tr>
<td>Conference Poster</td>
<td>poster</td>
<td>Conference Contribution - Poster Presentation</td>
</tr>
<tr>
<td>Dataset</td>
<td>dataset</td>
<td>Dataset</td>
</tr>
<tr>
<td>Working or Discussion Paper</td>
<td>design</td>
<td>Design Output</td>
</tr>
<tr>
<td></td>
<td>c-paper</td>
<td>Discussion Paper</td>
</tr>
<tr>
<td></td>
<td>exhibition</td>
<td>Exhibition</td>
</tr>
<tr>
<td></td>
<td>c-extension-presentation</td>
<td>Extension Activity</td>
</tr>
<tr>
<td>MovingImage</td>
<td>c-film-video</td>
<td>Film/Video</td>
</tr>
</tbody>
</table>

- ![Diagram](image_url)
Controlled vocabulary
(aka labels, subject headings, thesauri, etc)

180299 Maori Law Not Elsewhere Classified
180299 - Maori Law not elsewhere classified
180299 - Māori Law not elsewhere classified
180299 - Māori Law not elsewhere classified
ANZSRC Fields of Research::18 - Law and Legal Studies::1802 - Māori Law::180299 - Māori Law not elsewhere classified
Controlled

180299 Māori Law not elsewhere classified
Totally controlled

0502 Environmental Science And Management [8]

0502 Environmental Science and Management [75]
All under control here

Source: https://xkcd.com/927/

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Author names

Developing wide-area networks and Von Neumann machines

Adamson, Andrew ; Baker, Brenda ; Baker, Brett ; Carter, Chris

Adamson, A. ; Baker, B. ; Baker, B. ; Carter, C.

Baker, Brenda ; Adamson, A. ; Baker, B. ; Carter, C.

Adamson, A. ; Baker, Brenda ; Baker, Brenda ; Carter, C.

Adamson, A. ; Baker, Brenda ; Baker, B. ; Carter, C.

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When it just works

http://oadoi.org/10.1108/17511060810864589

https://researcharchive.lincoln.ac.nz/bitstream/handle/10182/2812/making-a-connection.pdf?sequence=1

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Ignore metadata at your peril!
Tips

An upgrade is a new system.
Tips

Map one-to-one
or many-to-one
Tips

Test with all possible input
Make backups
Tips

Fix the problem first,
the result second
Tips

Get familiar with regular expressions
Tips

Ignore metadata at your peril!

GIVE UP AND TRUST Google

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