Ziziphus mucronata

Source: JMK / Wikimedia
VRA Core 4 in Transcultural Studies

Adopting Core 4 in a DH Environment

Matthias Arnold, Heidelberg | Session VRA Core 4 Unbound | March 13, 2014 | VRA 32nd Annual Conference
"Asia and Europe in a Global Context: The Dynamics of Transculturality"
Established in October 2007 as part of the Excellence Initiative by the German Federal and State Governments, carried out by the German Research Foundation (DFG) and the German Council of Science and Humanities (Wissenschaftsrat)
Aim is to “enhance the understanding of the multi-layered interactions between and within Asia and Europe”
Ca. 60 projects organized in 17 interdisciplinary research groups and 4 research areas; DH unit: Heidelberg Research Architecture (HRA)
5 new professorships, Graduate School, M.A. Transcultural Studies

(Some) Research fields:

Languages: English, German
Chinese, Japanese, Arabic, Hindi, Bengali, Sanskrit, Russian, etc.
The Heidelberg Research Architecture (HRA)

HRA is a cooperation partner to Cluster projects providing consultation – training – development with partners on local, national, international level.

Small team
6 people - 3 positions for programming

Closely related to the newly established Junior Research Group “Digital Humanities - Digital Cultural Heritage”

Main Expertise:
General Digital Humanities consultancy for projects – Conceptual design for DH related tasks
Digitisation, MediaLab – Workflows and documentation – Data migration – Workshops and trainings – Co-teaching
Project databases – Research analysis
Development: **Metadata Framework Tamboti**

**Webportal:** http://hra.uni-hd.de
Development I: Project databases
Tamboti

A „suite of web applications that forms an integrated environment for interdisciplinary and internationally distributed studies in transcultural dynamics.‟

- Modular structure, applications within eXist-db
- LDAP integration, granular access control
- Users can store, organise, share, and publish multilingual metadata records of different media formats: text, image, video, audio
- Different intl. standardized metadata schemas (sustainability, data exchange); **one search for all** data/schemas

  currently integrated formats: MODS - VRA core - TEI, Wiki records, video annotation records (structured notes in MODS), text extracted from uploaded PDF files, name authority files (e.g. MADS)

Source code: https://github.com/eXist-db/tamboti  
Heidelberg instance: http://tamboti.uni-hd.de
Records 145 to 154 of 155 records found in /resources

145  Krishna (Depicted); Archibald Orr Ewing & Co (Client): Textile label of Archd. Orr Ewing & Co.

146  Krishna (Depicted); Leela (Depicted): Krishna Leela. Krishna plays flute while girls enjoy

147  Msora Shyam, contributor Mannmohan Krishna N/A

148  The Hare Krishna Movement. Lifting of Govardhana Hill. The Hare Krishna Movement 2011-10-27

149  Zimbo, contributor Homi Wadia, J. B. H. Wadia, Chand Pandit, Chitra, Azaad Irani, Krishna Kumari, and Achala Sachdev N/A


Of scientific geographical exploration in Asia (beyond the limits of actual surveys) the modern period has been so prolific that it is only possible to refer in barest outline to some of the principal expeditions, most of which have been directed either to the great elevated tableland of Tibet or to the central depression which exists to the north of it. In southern Tibet the trans-Himalayan explorations of the native surveyors attached to the Indian survey, notably Pandits Nam Singh and Krishna, added largely to our knowledge of the great plateau. Nam Singh explored the sources of the Indus and of the Upper Brahmaputra in the years 1855-1867; and in 1874-1875 he followed a line from the eastern frontiers of Kashmir to the Tengri Nor lake and thence to Lhasa, in which city he remained for some months. Krishna's remarkable journey in 1879-1882 extended from Lhasa northwards through Tsaidam to Sachu, or Saiyu, in Mongolia. He subsequently passed through eastern Tibet to the town of Darchendo, or Tachihlu, on the high road between Lhasa and Peking, and on the borders of China. Failing to reach India through Upper Assam he returned to the neighbourhood of Lhasa and on the plateau.
<table>
<thead>
<tr>
<th>Record</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>145</td>
<td>Krishna (Depicted); Archibald Orr Ewing &amp; Co (Client): Textile label of Archd. Orr Ewing &amp; Co.</td>
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</tr>
<tr>
<td>150</td>
<td>Nidimoru, Raj and D.K. Krishna. Flavours, performed by Reel Karim, Anjan Srivastav, Bharati Achekar, and Leslie Lewis. USA: Net Effect, 2004</td>
</tr>
</tbody>
</table>

The text is extracted from a webpage showing records found in the Tamboti database. The records are related to the term 'Krishna' and its depiction in various contexts.
The Hare Krishna Movement. Lifting of Govardhana Hill. The Hare Krishna Movement/2011-10-27
Video annotation (structured notes in MODS)
Search for records in MODS or TEI or VRA or Wild format, using the or search operator, searching for
and in the Name Field (MODS, TEI, VRA)
inside /resources
sorting by Score descending

Records 145 to 154 of 155 records found in /resources


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Image records (VRA core) 
Bibliographic records (MODS) 
Video annotation (structured notes in MODS) 
Text annotation (TEI)
A framework for metadata and annotations

Bibliographic information in MODS

Part of video and part of audio annotation with pan.do/ra

Part of image annotation with HyperImage

Image metadata in VRA core 4 with Ziziphus
Ziziphus – The VRA Core editor

Digital still image metadata editor
Some requirements

- Integration with Tamboti Metadata Framework
- Saving data writes XML (store directly into db)
- Form based editing (do not expose xml to users)
- Customisable interface (e.g. based on editor roles)
- Integration of controlled vocabularies
- Allow multilingual data
- Encode agent roles
- Allow agents (with roles) for descriptions
- Allow alternative notation of dates
- Add local data
- Keep code for editing forms simple
1) Multilingual data

VRA Core allows xml:lang

Problem: encoding more complex data
xml:lang="ja-Latn-x-ala"

=> new global attributes:

• @language
  three-character code according to ISO 639-2b (e.g. eng, ger, chi, hin)

• @script
  four-character code according to ISO 15924 (e.g. Latn, Arab, Hans, Deva)

• @transliteration
  list of “transliteration schemas” based on ALA-LC (e.g. “Arabic/ALA-LC”,
  “Chinese/modified Wade-Giles”)
2) Agents: roles and „description-authors“

- additional @vocab and @type to accommodate list of MARC relator terms

- allow repeatable agents ("author") within <description>

  <description>
  <text lang="eng" script="Latn">some description</text>
  <author>
    <name vocab="local" type="personal" refid="uuid of person">name of author</name>
    <role vocab="marcrelator" type="code">aut</role>
  </author>
  <author>
    <name vocab="local" type="personal" refid="uuid of person">name of editor</name>
    <role vocab="marcrelator" type="code">edt</role>
  </author>
  </description>
3) Dates: uncertainty and alternativeNotation

• based on recommendations in CCO: additional @type: about, before, after, active

  -> will allow better computing of numerical date values

  <earliestDate type="before">1256</earliestDate>

• subelement <alternativeNotation> for non-western calendar data

  <date>
    <earliestDate>1941-03-06</earliestDate>
    <alternativeNotation lang="chi" script="Hant">民國三十年三月六日</alternativeNotation>
    <alternativeNotation lang="chi" transliteration="Chinese/ALA-LC">Minguo 30 nian 3 yue 6 ri</alternativeNotation>
  </date>
4) Avoid „code explosion“

VRA Core 4 very flexible:

- all global attributes may be attached to every element
- we even added more global attributes
- for automatically generated forms: editor too flexible!

=> restriction:

global attributes may only be used below `<elementSet>` level
Ziziphus Demonstration (Screencast)
Watch the video online:
http://kjc-sv030.kjc.uni-heidelberg.de/OM/480p.webm
Outlook
Ziziphus

Next steps in development:

• Implement controlled vocabularies: VIAF (ongoing), Getty AAT
• Improve batch upload
• Relations editor
• Group editing: viewer (ongoing) -> editor
• Documentation

Medium-term plans

• Read/write embedded metadata
• Export to RDF
• Standalone editor
Ziziphus

Currently working on Beta 2 version (v0.30): https://github.com/betterFORM/ziziphus/

Access Tamboti/Ziziphus for testing:

- testuser accounts (name is password)
  - testuser1 - testuser2 - testuser3
- documentation in preparation
  - http://ziziphus-help.uni-hd.de
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Are you interested in working with us on the VRA editor?

We are seeking collaboration partners to further develop Ziziphus.
**Suggestions for possible extensions of VRA Core 4 (draft)**

These suggestions were developed while preparing the migration of an image collection of popular Indian art to VRA Core 4 and the development of a VRA Core metadata editor at Heidelberg. The list is not comprehensive and there are even some "tentative" items at the end of this file that perhaps are less convincing or need more discussion.

The idea of this document is to a) share our thoughts about the VRA Core and encourage feedback and/or start a discussion about the individual entries, and b) to serve as container for other ideas of additional extensions that may be around.

**Global attributes**

- **Code explosion**: The Heidelberg VRA Editor ("Zulphus") uses XForms that are automatically generated from the schema. A big problem was the extreme flexibility of the VRA core 4 schema, allowing all global attributes at almost every node level. This lead to an "explosion" of the code and heavy performance losses in the interface. We have therefore decided to only allow global attributes _below_ the `<elementSet>` level and defined the required attributes for each set. Perhaps the schema should be a bit more restrictive at this point, especially to make dynamic uses of the schema more efficient.

- in addition to `xml:lang` we use `@lang`, `@script`, `@transliteration` (as in MODS)
  - `Language`: "lang"
    - three-character code according to [ISO 639-2b](https://en.wikipedia.org/wiki/ISO_639-2b) (e.g. eng, ger, chi, hin)
  - `Script`: "script"
    - four-character code according to [ISO 15924](https://en.wikipedia.org/wiki/ISO_15924) (e.g. Latin, Arab, Hans, Deva)
  - `Transliteration scheme`: "transliteration"
    - values as in the "transliteration scheme" dropdown for the Tamboti MODS-editor, using an expanded `ALA-LC List` (e.g. "Arabic/ALA-LC", "Chinese/modified Wade-Giles")

- `xml:lang` tag is kept for data exchange

- **additional global attribute** `@lastAccessed`
  - structured date in `yyyy-mm-dd` format
  - to be used in conjunction with e.g.
    - global attribute `@href`
    - `<source><refId type=UR> or `<refId type=openURL>`
 Possible further additions/modifications

- **Grouping of elements**
  - put original script, transliteration, and translation in one element, e.g. inscription, title

- **Calendar information**
  - Identify the calendar, e.g. Julian/Gregorian, Minguo, Japan, Hindu, Coptic, Buddhist…

- **Dealing with user-defined elements**
  - not all variants of data can be covered by the core – how to allow users to add their own elements?
VRA Core

Expanding the use of VRA Core

Tamboti

- Wiki and slideshow modules use images from Zizphus
  Next step: use VRA Core metadata (e.g. title, description)

External applications

- HyperImage (part-of-image-annotation): add VRA core as metadata schema
- pan.do/ra (part-of-video annotation): include image metadata

Provide sample records

- from Priya Paul Collection: whole collection is available
  [http://priyapaulcollection.uni-hd.de/](http://priyapaulcollection.uni-hd.de/)
- in preparation: 10 records as full metadata samples
Contact:

http://hra.uni-hd.de
http://tamboti.uni-hd.de

http://ziziphus-help.uni-hd.de
ziziphus@asia-europe.uni-heidelberg.de

matthias.arnold@uni-hd.de