

Linked Web Data for Research

Graham Klyne

My background:

- Industry software developer for many years (decades), applications including:
 - real-time process control, motion capture, computer aided design, networking for financial services
- Worked on IETF and W3C standards for email and web data; co-editor of RDF Concepts document
- Joined David Shotton's IBRG group in Zoology about 10 years ago to work on research data management (images and more) using Semantic Web/Linked Data ideas; now part-time with OeRC

Populating data repositories

Data is increasingly seen as a first class product of research, underpinning trust in results

- “Research Objects”
- Reviewability
- Reproducibility
- Funder mandates



I perceive many data repositories are under-used

- so where will the data come from?

Research data: the “first mile”

A missing link?



Annalist: Linked Data Notebook

Work-in-progress

- Demo:
<http://annalist.net>
- Code:
<https://github.com/gklyne/annalist>

Target small groups and projects
without dedicated software
development capacity

Currently being used in an
exploratory capacity with two projects

See *also*: ORDS – <http://ords.ox.ac.uk>

The screenshot shows a web browser window with the URL `demo.annalist.net/annalist/c/DMO_Experiment`. The page title is "Experimental Digital Music Object". The interface includes a navigation bar with "Home", "DMO_Experiment", and "Event" tabs, and a user profile "User gklyne".

The main content area displays details for the "2014_11_ring_cycle" event. The "Label" is "Wagner Ring Cycle, Birmingham, November 2014". The "Description" states: "The Wagner Ring Cycle performed at the Birmingham Hippodrome, conducted by Valery Gergiev. Birmingham Hippodrome will present Wagner's epic Ring Cycle conducted by Valery Gergiev with h world-famous Mariinsky Opera and a stellar cast including Willard White, Ekaterina Gubanova, And Schager, Vitaly Kovalyov, Mikhail Petrenko and Mlada Khudoley." Below the description is a list of performances:

1. DAS RHEINGOLD Wednesday 5 November
2. DIE WALKÜRE Thursday 6 November
3. SIEGFRIED Saturday 8 November
4. GÖTTERDÄMMERUNG Sunday 9 November

The "Umbrella event" is "2014-11-05" and the "Event location" is "birmingham_hippodrome". The "Event starts" is "2014-11-05" and the "Event ends" is "2014-11-09".

The "Composition(s)" section lists "Composition" and "wagner_ring_cycle".

The "Performers" section lists roles and performers:

Role	Performer
Conductor	valery_gergiev
Bass	willard_white
Mezzo-soprano	ekaterina_gubanova
Tenor(?)	andreas_schager
	vitaly_kovalyov
Bass	mikhail_petrenko
Soprano	mlada_khudoley

The "Organizations" section lists "Role of organization" and "Organization":

Role of organization	Organization
Opera company	mariinsky_opera

The "Documentary resources" section lists "Type of document" and "Documentary resource":

Type of document	Documentary resource
	wagner_ring_cycle_scores

The "Links" section lists "Role" and "Link":

Role	Link
Web site	www.birminghamhippodrome.com/WhatsOn_focus.asp?showid

At the bottom, there are buttons for "Edit", "Copy", and "Close", and a "View description" button.

Research Software Development

A different model?

“Self patronage”

- a semi-entrepreneurial model within academia

Funded by engagement with research projects

- currently 2 projects, each about 20% fte
- working directly with researchers
- less costly for projects than a full-time engineer

Tool development that survives any single project

- working across rather than within silos
- longer-term sustainability
- open development promotes sharing and re-use