Electronic publishing in academic environments: The FIGARO project

Bas Savenije

OAI Workshop, Geneva, October 17-19, 2002
The traditional scientific journal

- Growing emphasis on quality assessment
- Growing importance of branding
- Present situation: peer review and quality assessment are the central aspects
- The journal’s essential role is to enable managers to judge the quality of individual scientists
Point of departure

The traditional scientific journal is:
- sluggish,
- financially unaffordable.

It has become an obstacle for communication among scholars and, thus, denies its original raison d’être.
Innovation?
WE'RE ONLY IN IT FOR THE MONEY/LUMPY GRAVY

WE'RE ONLY IN IT FOR THE MONEY

MOTHERS
Innovation?

Innovation is complicated because

- commercial publishers are mainly in it for the money
- many academics want to stick to the traditional quality measures
# SPARC ALTERNATIVE JOURNALS CAN SAVE LIBRARIES MONEY WITHOUT SACRIFICING QUALITY

<table>
<thead>
<tr>
<th>Title</th>
<th>Price</th>
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<tbody>
<tr>
<td>Topology &amp; Its Applications</td>
<td>$2,672</td>
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<tr>
<td>Journal of Crystal Growth</td>
<td>$9,220</td>
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<td>Evolutionary Ecology (price reduced in 2001)</td>
<td>$467</td>
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<td>Topology</td>
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<td>Organic Geochemistry</td>
<td>$2,513</td>
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<td>Sensors &amp; Actuators, A &amp; B</td>
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<td>Machine Learning</td>
<td>$1,050</td>
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<td>Plant Ecology (formerly Vegetatio)</td>
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<td>Tetrahedron Letters</td>
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<td>Chemical Physics Letters</td>
<td>$10,264</td>
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<td>Jnl of Logic &amp; Algebraic Programming</td>
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<td>Algebraic and Geometric Topology</td>
<td>Free</td>
</tr>
<tr>
<td>Crystal Growth &amp; Design</td>
<td>$1,781</td>
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<td>Evolutionary Ecology Research</td>
<td>$340</td>
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<td>Geometry &amp; Topology</td>
<td>Free</td>
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<tr>
<td>Geochemical Transactions</td>
<td>$100</td>
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<tr>
<td>IEEE Sensors Journal</td>
<td>$395</td>
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<td>Jnl of Machine Learning Research</td>
<td>Free</td>
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<td>Jnl of Vegetation Science</td>
<td>$450</td>
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<td>Organic Letters</td>
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<td>PhysChemComm</td>
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<td>Theory &amp; Practice of Logic Programming</td>
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| Total                                      | **$39,959** |
Present trends

- Incremental changes: print → electronic
  - by publishers themselves
  - co-publishing (HighWire)
  - new e-journals (academic community)
- Innovations: emphasis on communication
  - discipline oriented: archives, publication sites, portals
  - institution oriented: repositories
- A worldwide movement towards Open Access:
  PLoS, BOAI, Open Archive Initiative, SPARC
Possible trend #1

A gradual revolution:
• Print journals
• Full text e-versions of print journals
• E-journals
• Multimedia
• Dropping the concept of issues
• Publication sites
• Peer review after publication
• Additional services
• Portals
• Virtual communities
Possible trend #2

The increasing importance of Archives:
• Personal archives
• Institutional archives
• Aggregated by discipline
• Peer review organised by research communities
• Additional services
• Made accessible by portals
• Virtual communities
• New quality measures, relating not to the brand but to the quality of the work itself
• Resulting in a global mapping of science
History

To fully understand our position and our purpose, a basic understanding of the current state of scholarly communications is beneficial. Here you will find a short history of academic publishing and the scientific journal, as well as some insight into the situation that sparked the formation of GAP and Requade, the two initiatives that ultimately combined to create FIGARO. The name FIGARO is an acronym partially taken from the names of these previous projects: *F*ederated *I*nitiative of *G*AP and *R*equade.

Read more...
“FIGARO”?

Federated Infrastructure GAP and ROquade
FIGARO’s participants

- University of Utrecht (co-ordinator)
- Core consortium members: Universities of Delft, Hamburg, Oldenburg, Firenze; Daidalos
- Content providers:
  - Academic: Leuven, Lund, Delft, Firenze
  - SME’s: DiG (Poland), Lemma (Netherlands)
- Dissemination: SPARC
- 1.4 million euro provided by EC
- Started May 2002
Main features of FIGARO

- Providing an infrastructure for academic e-publishing that allows for modular use
- Facilitating a gradual transition from rather traditional to innovative models
- Not a publisher, in the traditional sense of the word, but assistance to scientists, research groups, institutes to become publishers themselves
- Decentralised structure
- Not for profit
FIGARO’s mission

As a partner organisation within the European academic community, our mission is to enhance scientific communication by improving the speed, simplicity and cost, which we aim to do through innovations in scholarly publishing.

We strive to provide effective and efficient e-publishing services to individual scientists and scientific organisations through the use of a shared organizational structure and the utilization of open source and standard base software tools wherever possible.

We are committed to supporting our customers by facilitating scientific communication and the publishing process in a way that allows them to retain ownership of their work as well as present their own profile or identity.
Publishing services

- moderated pre-print service
- traditional electronic publishing
- Publication site with peer review

technical and organisational infrastructure
FIGARO’s business model

- Organisation
  - Network, not hierarchical
  - Strong input from customers
  - No central branding
- Economics
  - Not for profit
  - Preferably open access
FIGARO’s network organisation

Service providers

• back office of the publishing process
• maybe also other service providers

Front offices (university press, publishing company, library)

• intermediate to academic community (scientists, editorial boards, academic organisations, etc): franchisees

Co-ordinator:

• recruiting new front offices
• stimulating synergy between front offices
• regulating the dynamics within the network
FIGARO’s financial model

The back office is a financially independent entity, working on a cost recovery base

- the costs for maintenance and innovation of the back office are paid by the front offices
- the higher the use of the back office, the lower the price

A front office needs money to pay the back office

- structural funding from its parent institution
- traditional model: subscription fees
- new models: towards open access
Open access: about costs

- “Open Access” does not mean that there are no costs involved
- “Open Access” does mean that the costs are not paid by the reader
- This is fair: actually, every scientific journal has some kind of monopoly from the viewpoint of the reader: the reader has no alternative
Open Access models: who pays?

- authors, paying for publication
- authors, paying for peer review
- institutions or societies supporting a journal or site
- institutions or societies buying the right for their members to publish in a certain medium
- grants, donations, sponsorships
A dilemma

- It is rather easy to construct a completely new economical model for academic publishing, in accordance with the interests of the academic community
- It is rather difficult to imagine how the present economical model may evolve into this new model
When everything is under control, you are going too slowly.

Mario Andretti
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Read more...

www.figaro-europe.net