Torino, Aula Magna dell'Università, 24 ottobre 2012



OCTOBER 22 - 28, 2012 | EVERYWHER

Set the Default to OPEN ACCESS.

Oltre le riviste.

Come cambia la comunicazione scientifica

Elena **Giglia**

Università di Torino Gruppo di Progetto "Open Access in Ateneo"

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Di cosa parliamo oggi

Altmetrics



Web, Open Access e comunicazione scientifica / 1





Our world is changing fast.

Twenty years ago few had heard of the Internet.

Today, it's used by
2 to 3 billion worldwide;
it's a trillion-euro marketplace;
it's the platform for innovation
transforming every sector from

healthcare to transport.

Those changes are thanks to research and innovation; in new technologies, new products, new business models.

These days,
it's hard to predict how the
world will look in a few
months, let alone years:
there's so much potential
in the path ahead.

But those changes also enable a new kind of research and innovation: open, agile and collaborative.

Innovation using new forums

Innovation using new forums like online collective platforms; new resources like open data; new techniques like data-mining.

Neelie Kroes, 25 sett. 2012

Web, Open Access e comunicazione scientifica / 2



Meanwhile, **Open Access is growing**: today representing well over 7 500 Journals, and 20% of scientific articles.

But that is slow growth. **It is not enough**.

We can't accept that, by and large, the results of publicly supported research are not yet available to the public.



Web, Open Access e comunicazione scientifica / 3

In every sector of our economy, every corner of our society, the Internet is bringing huge changes, and huge benefits for end users.



In spite of the importance of science – indeed because of it — this sector should be no different.

Making Open Access a reality for science, 29 maggio 2012

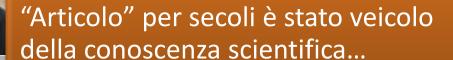
Let's show them that this sector, too, can respond positively.



I quattro principî



Disgregazione/riaggregazione



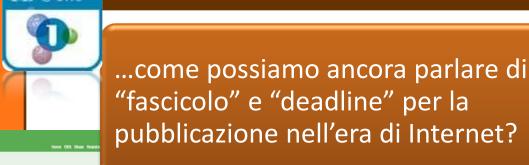
...incentivi per chi fa open science ..."articolo" fa parte di un mercato anelastico della conoscenza dove sono in vigore scarsità artificiale e regole decise dall'alto su cosa sia l'impatto...

J.Wilbanks

The Fragmentation and Re-Integration of Scholarly Communication, UCLA 2011

...ma, come il mercato della musica, il mercato della conoscenza è soggetto alla stessa forza disaggregante di Internet





DISGREGAZIONE:

blog post, tweet...

enhanced publications,

PLOS one

CANCERCOMMONS

Bringing science to the patient and patient insights to science in atient at the front end of a

computational methods and a network of experts and

RIAGGREGAZIONE:

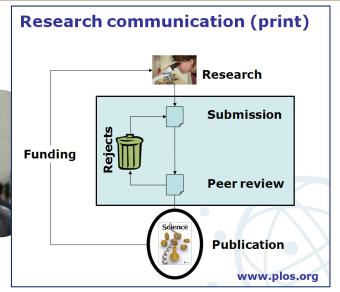
nanopublications, dataset publications;

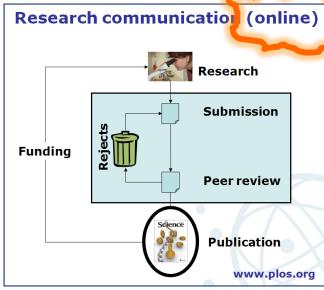
servizi che riaggregano contenuto (anche on demand); progetti come Science Commons; Hubs come PLoS Biodiversity

Licenze per il riuso



Nuove funzioni





Quali funzioni possono essere ripensate?

DISSEMINAZIONE

ORGANIZZAZIONE DEL CONTENUTO

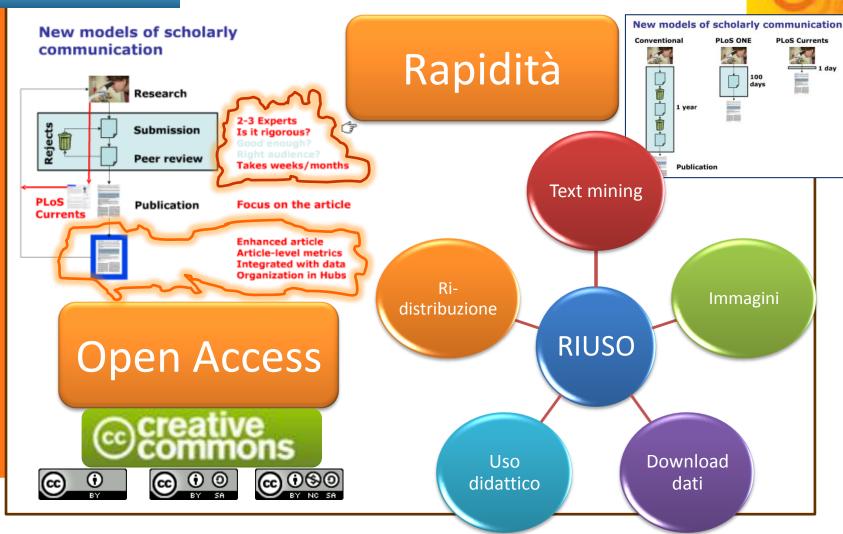
Open Access; rapidità

A POSTERIORI: sul reale impatto

M. Patterson, Re-engineering the functions of a journal, OAI7, Geneva 2011

Disseminazione





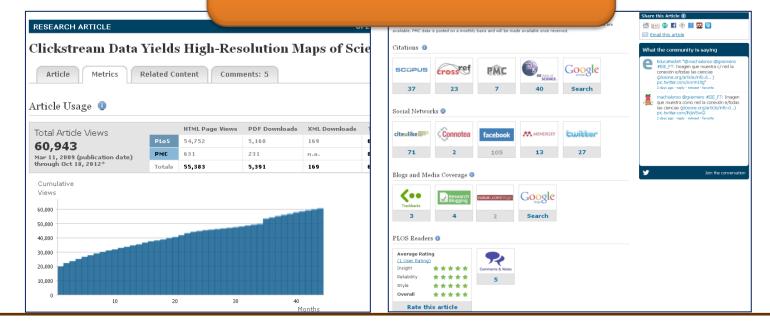
Disseminazione



...in questo modo si massimizzano disseminazione e impatto...



... e si possono misurare a livello di articolo...



Riaggregazione

...riaggregazione di contenuti...

http://hubs.plos.org/

... valore aggiunto post-pubblicazione...

Sign In ▼ Create Account Feedback PL

diclofenac is an unknown but potential risk to related species with similar feeding habits to Gyps

bengalensis. Therefore, an accurate assessment of the phylogenetic relationships among Gyps

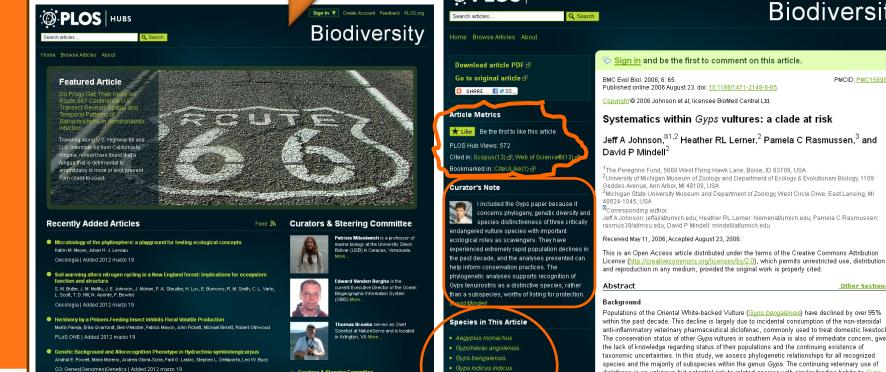
of their respective relatedness to susceptible G. bengalensis.

Results

vultures should aid in their conservation by clarifying taxonomic uncertainties, and enabling inferen

tic regults using mitashandrial aut P. ND3 and control region acquence data indicat

PLOS HUBS



Gyps indicus tenuirostris

Gyps rueppellii

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> Curators & Steering Committee

Nuove riviste: eLIFE





About

The Journal

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eLife Labs

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eLife is now publishing its first research articles, ahead of the eLife journal Web site launch this winter.

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eLife is a researcher-driven initiative for the very best in science and science communication. We promote rapid, fair, and constructive review. We will use digital media and open access to increase the influence of published works. We commit to serving authors and advancing careers in science. At eLife,

Publishing is just the beginning.

Publishing is just the beginning

http://www.elifesciences.org

Nuove riviste: eLIFE



THE ELIFE INITIATIVE

Ours is a unique collaboration between researchers and three influential funders of research in life science and biomedicine to advance science through effective research communication. Learn more.



THE JOURNAL

The first aim of the initiative is to launch an open-access journal covering the most outstanding advancements – from basic biological research through to applied, translational, and clinical studies. Learn more.



ELIFE LABS

With eLife, the scientific community is taking a new, collaborative approach to research communication. eLife Labs space to share and discuss goals, ne developments, experiments, and challenges, Learn more.



HOWARD HUGHES MEDICAL INSTITUTE



wellcometrust

...nasce dalla collaborazione fra ricercatori ed enti di finanziamento della ricerca

eLife is a researcher-led digital publication for outstanding work, a platform to maximise the reach and influence of new findings and a showcase for new approaches for the presentation and assessment of research.

Labs: per condividere idee

Nuove riviste



Enhanced publications



Enhanced publications

"accresciute"

"valorizzate"

RESEARCH DATA

EXTRA MATERIALS

POSTPUB DATA



collega la pubblicazione con materiale multimediale, datasets, blogs, commenti altrimenti dispersi sul web...

INTEGRAZIONE [offre link espliciti]

SURF, Enhanced publications



Enhanced publications e scienze umane

Semantic WORDS

Project site for Enhanced Scholarly Publications using WordPress and the Semantic WOR

HOME ABOUT THE BOOKS SEMANTIC WORDS THE PLUGINS INCONTEXT VISUALIZA

Enhancing scholarly publications involves presentation in a Web environment with interlinking of the 'objects' of a document such as: data on which the publication is based, supplementary materials, post-publication reactions and secondary analyses. This Website is the central location for an ongoing project of creating, co-locating, and intertextual linking of Enhanced Publications of traditionally published books related to Digital Scholarship.

Central to this effort is the release of Semantic WordPress for Digital Scholarship, or Semantic WORDS, a pair of custom plugins developed to introduce traditionally published books to the realm of web-based scholarly communication. The four book Web sites developed to launch this project contain a broad range of features intended to enhance the printed versions of these





books, including supplementary resources, visualizations, intertextual linking of content, and formal structuring of content using Semantic Web ontologies. In the next phase, this project involves development of a central database that allows for aggregation of content across the individual book Web sites, such that object relationships, discursive threads, and contextual factors can be made explicit.

The first of the Semantic WORDS plugins, Enhanced Bibliplua, provides a suite of features for authors, which are focused on organization and publication of academic content on the Web. Features include custom page templates for academic texts, integration with Zotero for citation management, and expanded author profile pages for CV content management, such as publications,





An enhanced publication accompanying the HOME PURCHASE THE BOOK TABLE OF

e-Research: Transformati

About the Book

Acknowledgments

Editor and Authors

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RESOURCES

Presentation Slides

Related Publications

Related Videos

Institutions & Organizations

AUTHOR BLOGS

Can You See What I Know?

Digital Scholarship

The Citation Culture

VKS Ethnography

WCU Project Yeungnam University

Related Publications



Borgman, C. (2007). <u>Scholarship in the Digital Age</u>; <u>Information, Infrastructure and the Internet</u>. Cambridge, MA: MIT Press.



Hine, C. (2006). New Infrastructures for Knowledge Production: Understanding E-science. Hershey, PA: It Global.

POSTS

Welc me!

The site is a companion to e-Research: Transformation in holarly Practice (Routledge, 2009) and includes material both supplementing and expanding what is contained in the book. The site contains background information, new research and resources, visualizations, and opportunity to

Christine L. Borgman

2011 Harvard Digital Scholarship Summit: Keynote - Christine Borgman (UCLA)

Abstract

Several decades ago, access to scholarly information was the exclusive domain of publishers. Now research is disseminated by many formal and informal means, not interrule and publishers but also by preprint repositories and tweets. Access may one can separate signal from noise amidst the plethora of communication channel access are a result of the transition from a closed scholarly world to the open Web content and context of networked information, information services for readers and differences between publications and data. If future scholars are to use the acontent of yesterday, today, and tomorrow, the scholarly community must reclaim retrieval, rethink partnerships throughout the information life cycle, share responsinformation infrastructure, and address policy and incentive issues.

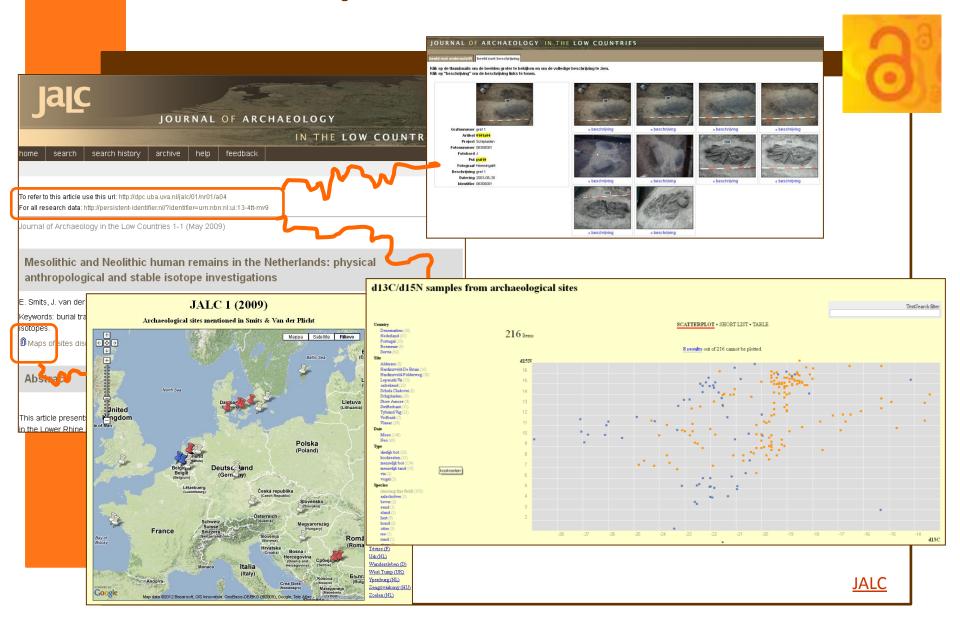




hitiative and the eHumanities Group's book-related websites to be released be known as the Semantic WORDS custom plugins developed to introduce scholarly communication. The four book ad range of features intended to upplementary resources, visualizations, content using Semantic Web

http://ep-books.ehumanities.nl/

Enhanced publications e scienze umane







Nanopub.org

Learn how to create, find, use and cite nanopublications Supplemental for change of the change of the

Datarrhoea?

Publicatarrh?

Nano publications



la più piccola unità di informazione scientifica pubblicabile

formate da triple: SOGGETTO-PREDICATO-OGGETTO

entità univoche, con URI

http://nanopub.org/wordpress/



Hanno identificativo univoco; metadati sulla provenienza (autore-fonte) SONO CITABILI

Nanopublication

Nanopublication ID

Integrity Key

Assertion

s1 p1 o1. o1 p2 o2. **Supporting**

s2 p3 o3. s3 p4 o4. o4 p5 o5. **Provenance**

...e processabili dal computer per creare percorsi inediti

<#26277419> <#2121378> <#13817745>

cprotein kinase> <phosphorylates> cproteins>

<subject> <subject> <object>

Nanopublications: Assertions with Attributes

Examples of attributes:

assertedBy - states which entity asserted (i.e. created) the statement

curatedBy - states that a specified entity has curated the statement

isPeerReviewed - states that this statement has been peer reviewed

 $\verb|isPublished| - states where this statement was first published$

isEvidencedBy - states that another statement, Y, should be considered evidence for this statement X

createdOn - states the date/time that the statement was created

hasAuthor - states who claims authorship of the statement

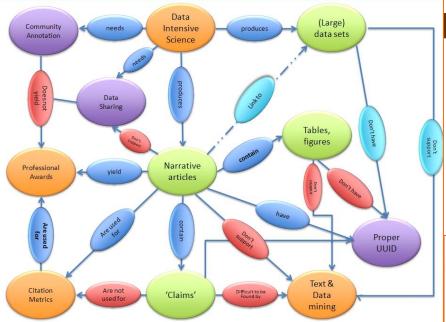
isApprovedBy - states who approves of the statement

isDeprecatedBy - states that the statement is no longer in use by the entity in question

J. Velterop, Science publishing: the different interests of record keeping and knowledge transfer, 2010

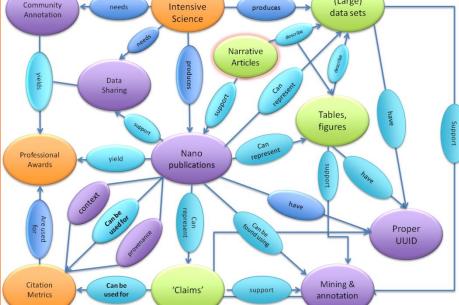


H. van Hagen et al. Novel Protein-Protein Interactions Inferred from Literature Context, 2009



Nanopublications sono funzionali alla scienza data-intensive, più rispondenti alle nuove esigenze

Data



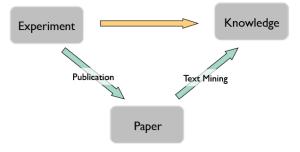
(Large)

...occuperanno il posto centrale riservato finora alle pubblicazioni?

B.Mons, Nanopublications, OAI7, 2011

Workflow online

Knowledge Burying in paper publication



...servono strumenti per trasmettere/conservare la "digital knowledge"

- Publishing/mining cycle results in loss of knowledge
 - $\ge 40\%$ of information lost

S.Bechhofer, Research Objects: Towards Exchange and Reuse of Digital Knowledge, OAI7, 2011

...Research Objects (RO) sono aggregazioni di risorse funzionali a un esperimento



http://www.myexperiment.org/

Workflow online

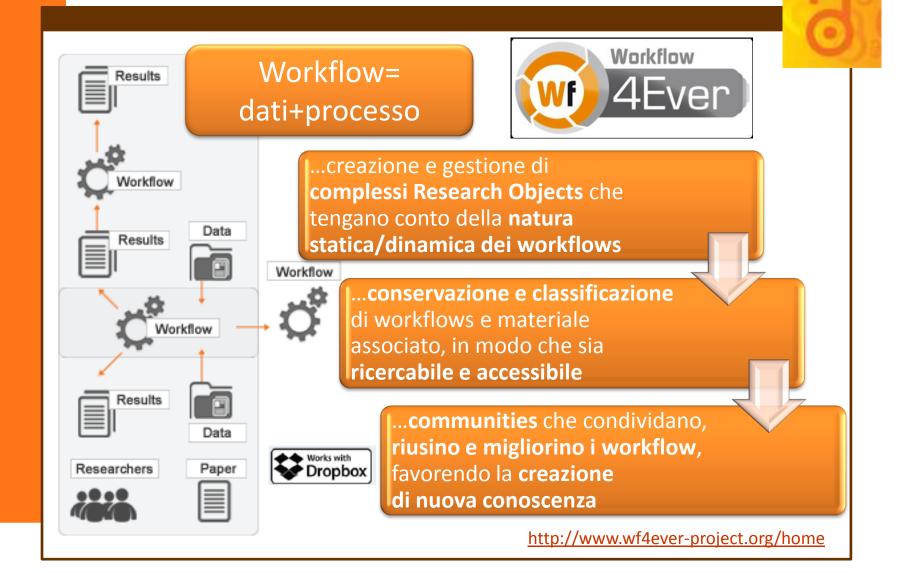


...riconoscere il ruolo centrale dei workflow per la e-research

- Reusable used as part of new study;
- Repurposeable reuse the pieces in a new (and different) study;
- **Repeatable** repeat the study, possibly years later;
- Reproducible a special case of repeatability with a complete set of information/results to work towards;
- Replayable go back and see what happened;
- Referenceable cite in publications;
- Revealable provenance and audit;
- Re-interpretable crossing boundaries;
- Respectful appropriate credit and attribution;
- **Retrievable** discover and acquire.

D. De Roure Replacing the Paper: The Twelve Rs of the e-Research, Nature blogs, 2010

Workflow online



Altmetrics

Retraction Watch

Diederik Stapel faces criminal

The Dutch media are reporting that Diederik Stapel, the T psychologist who fabricated data in dozens of studies, is facing a criminal probe for his misuse of some 2.2 million euros (roughly \$2.8 million U.S.) in government grar

estigators have last month th financial administration of [Stape will also have several witnesses

stapel is suspected of having applied for nvestigators also are exploring whether

is guilty of forgery by using forg

peer review: lenta, spesso inefficace

citazione: considera solo chi scrive

Impact Factor: facilmente manipolabile

altmetrics

http://altmetrics.org/manifesto/

... il lavoro dei ricercatori si è spostato sul Web dove possiamo:

contare i downloads

ascoltare i tweet

tracciare l'uso...

tutte queste "tracce" sono **ALT-METRICS**

Impact



peer-review





downloads views

expert opinion

storage links bookmarks conversations

Altmetrics

altmetrics

Tools

A growing directory of noteworthy altmetrics apps:



ImpactStory is a Web-based application that makes it easy to track the impact of a wide range of research artifacts (such as papers, datasets, slides, research code). The system aggregates impact data from many sources, from Mendeley to GitHub to Twitter and more, and displays it in a single, permalinked report.



ReaderMeter is a mashup visualizing author-level and article-level statistics based on the consumption of scientific content by a large population of readers. Readership data is obtained via the Mendeley API. Reports are available both as HTML and in a machinereadable version as JSON and are released under a



permette di tracciare
l'impatto sul
social web

è **immediato**, più **aderente** alla nuova realtà di e-science

Altmetrics expand our view of what impact looks like, but also of what's making the impact. This matters because expressions of scholarship are becoming more diverse.

Because altmetrics are themselves diverse, they're great for measuring impact in this diverse scholarly ecosystem.

Let's make science open

3

The best thing about **Internet** is that it's **open.** In every field **it let us share and innovate**

In science,
OPENESS IS
ESSENTIAL

Let's tear down the walls that keep learning sealed off. And let's make science open.



Let's make science open, giugno 2012

Open science doesn't mean ignoring economic reality.

Of course we need business models to be sustainable.

But that doesn't mean we have to carry on doing things the way they have always been done.

So, wherever you sit in the value chain, wheter you're a researcher or an investor or a policy maker, my message is clear: let's invest in collaborative tools that let us progress...



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Set the Default to OPEN ACCESS.

Buona Open Access Week!

www.oa.unito.it