

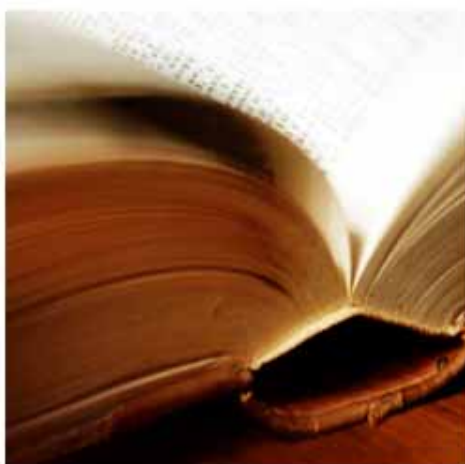
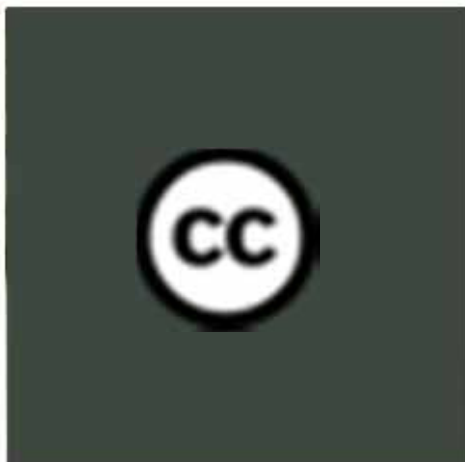
Open Access to Open Science

Current State in Japan

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National Institute of Science and Technology Policy (NISTEP)

Oct 29, 2015



A vertical collage of images related to books and reading. It includes close-ups of book spines, an open book, glasses, and a book cover.

[illegible]

国際的動向を踏まえたオープンサイエンスに関する検討会

Agenda

1. Brief Review of the Backgrounds of EJ, Open Access and Open Science
2. Open Access and the 4th Science and Technology Basic Plan
3. An Overview of Open Access to Open Science
4. Driving Force of Open Science

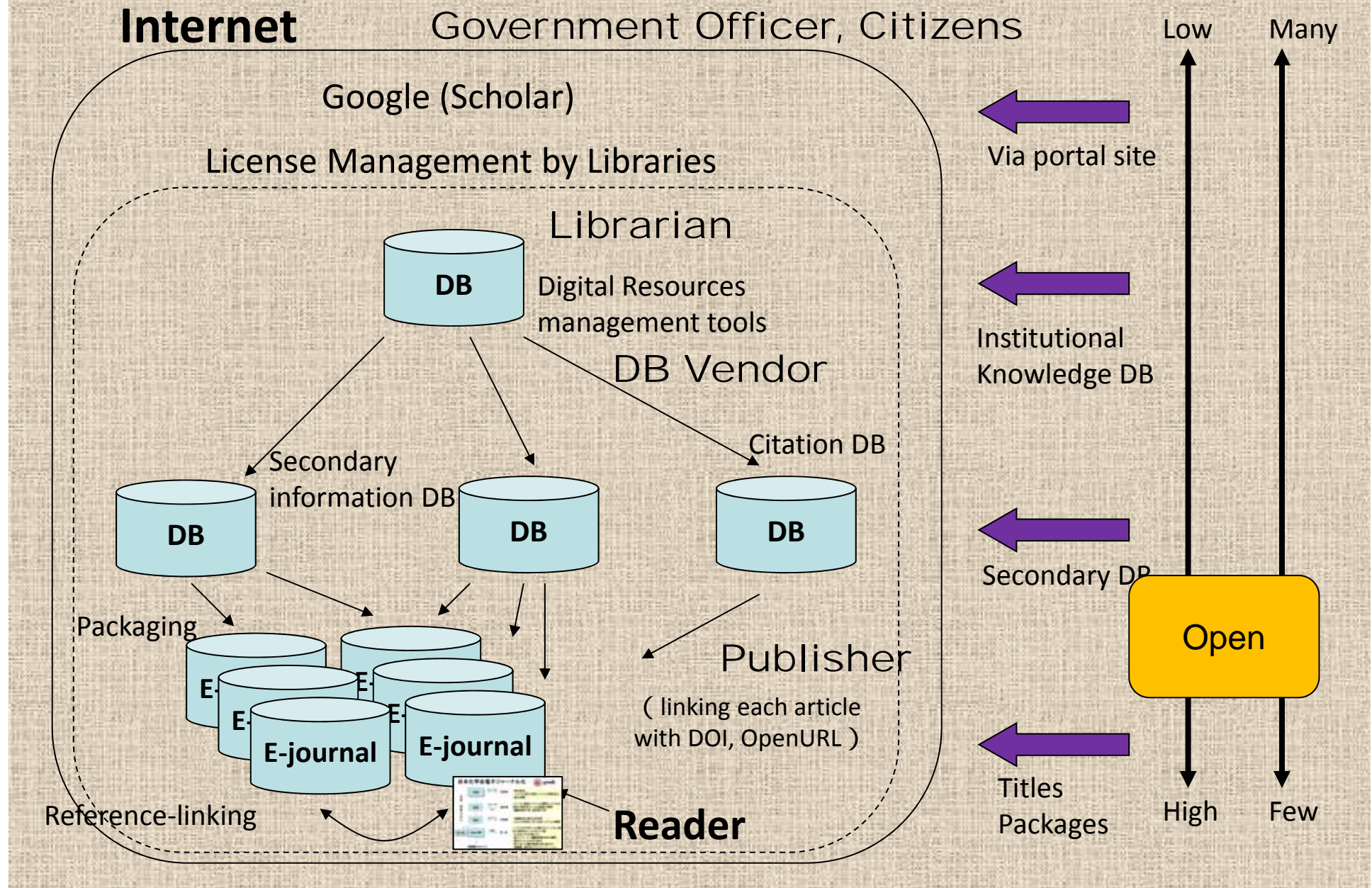


Agenda

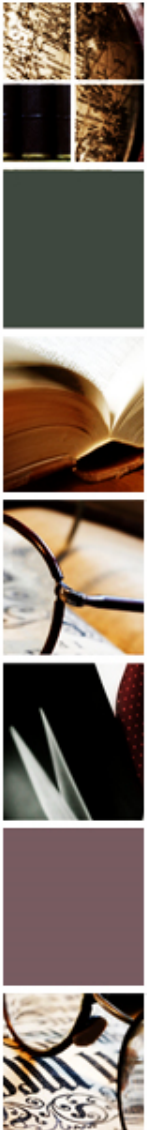


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EJ: Many Routes, Many Readers



Turning Point

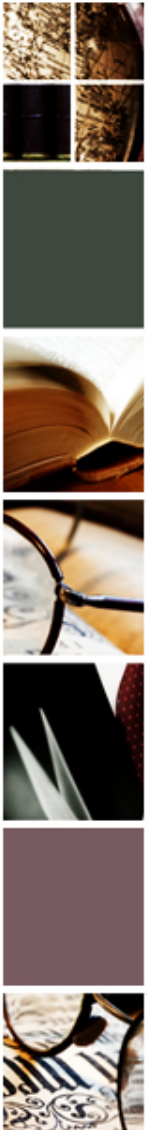


Beyond just “Publishers and Librarians”
(2005 - Weak signals, 2010 - Trends)

- Gold OA journal “Rush”
- OA mega-journal
- Mendeley, ResearchGate
- Altmetrics
- Rubriq
- Data journal
- figshare

SPRINGER NATURE

EJ and its backgrounds have casted



Questions to the significance of

- Journal 「雑誌」の意義
- Peer Review 「査読」の意義
- Evaluation 「評価」の在り方
- Research Outputs 「研究成果」の在り方
- Reuse of Outputs 「成果の再利用」の在り方
- Research itself 「研究」の在り方

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1. The 4th Science and Technology Basic Plan



- The 4th Science and Technology Basic Plan (FY2011-FY2015) of Japan states the promotion of open access mentioned the importance of open access
- 「国は、大学や公的研究機関における機関リポジトリの構築を推進し、論文、観測、実験データ等の教育研究成果の電子化による体系的収集、保存やオープンアクセスを促進する。また、学協会が刊行する論文誌の電子化、国立国会図書館や大学図書館が保有する人文社会科学も含めた文献、資料の電子化及びオープンアクセスを推進する。」
- **Stated clearly but not concrete directions for implementation**

Still

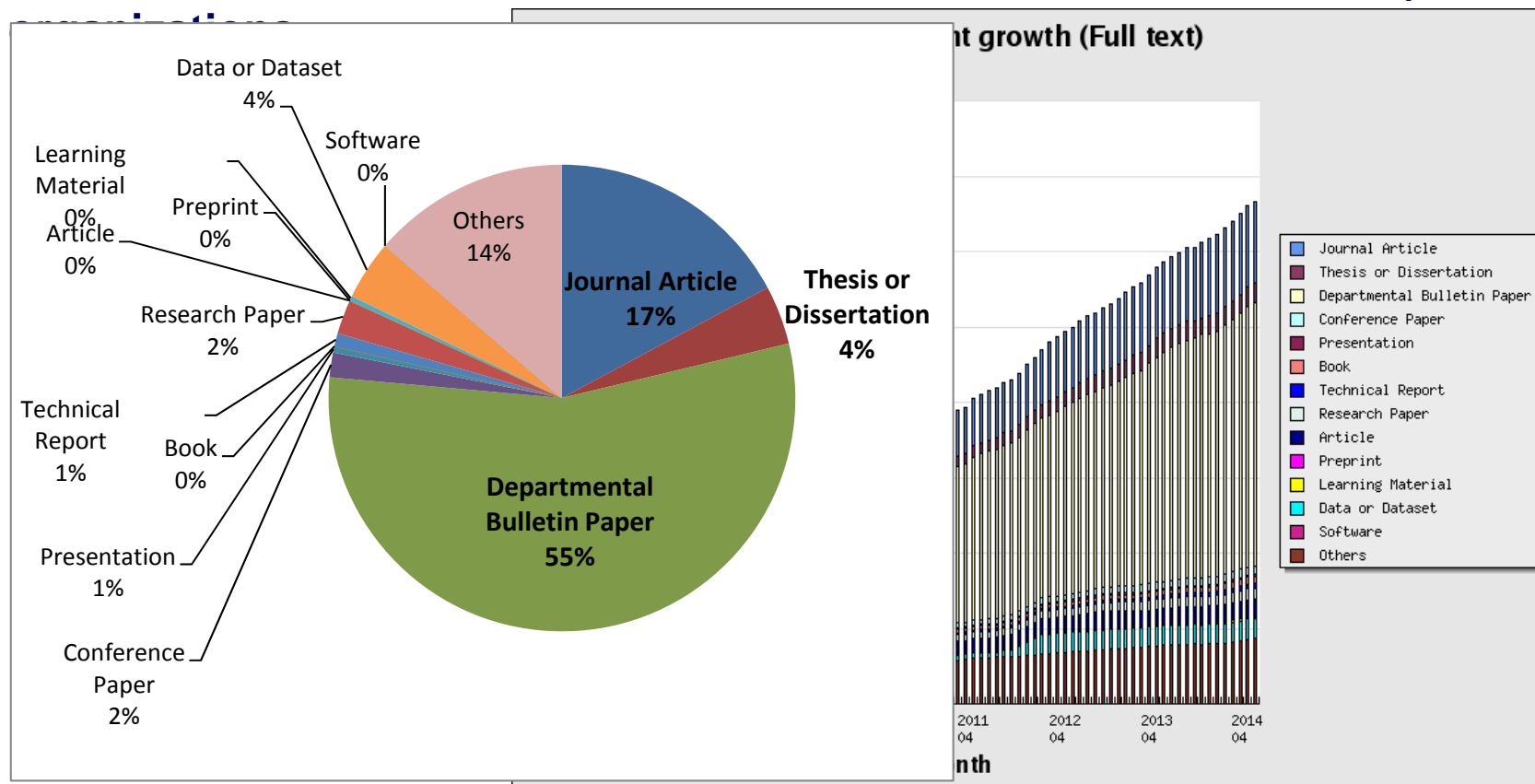


- The 4th Science and Technology Basic Plan leads
 - A) Growth of IR
 - B) JSPS policy for promoting OA scholarly publishing
 - C) (JST's mandate)

A) Growth of IR

2014/09/30 Number of organization: 476 (#1 country)

2014/09/30 Number of records ALL: 1,876,661, Full text 1,390,374 (in 391



source: http://irdb.nii.ac.jp/analysis/index_e.php

B) JSPS policy for promoting OA scholarly publishing

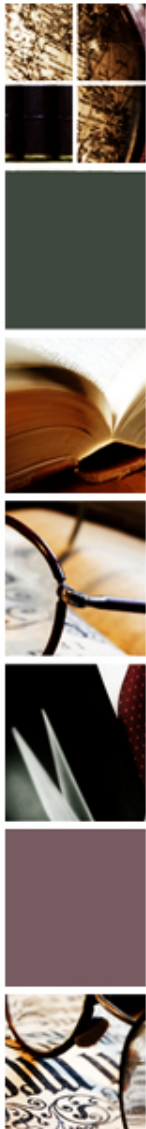
JSPS policy for promoting Open Access

- ◆ JSPS supports society publishers in publishing their research achievements (e.g. in scientific journals) under its “Grants-in-Aid for Scientific Research” Programs
- ◆ In 2013, a new grant category “Strengthening International Scholarly Communication” (403.9M JPY in FY2013) added with old ones revised:
 - ✓ Provide start-up funds for launching or converting to open access journals
 - ✓ Allocate separate funds for publication of journals in English
 - ✓ Introduce criteria for “measures with which to strengthen international scholarly communication” in review process
- ◆ FY2013: supported 31 projects for publishing open access journals (including *SPACE AND GEOSPHERE*, *Progress of Theoretical and Experimental Physics*, *Cancer Science*, etc.), with 298M JPY

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Syun Tutiya, The Current Status of Open Access in Japan At GRC Asia-Pacific Regional Meeting, November 18, 2013

<http://www.slideshare.net/tutiya/jst-presentation-grcrm2013tutiya11151300r>



Japan's state of scholarly STM publishing



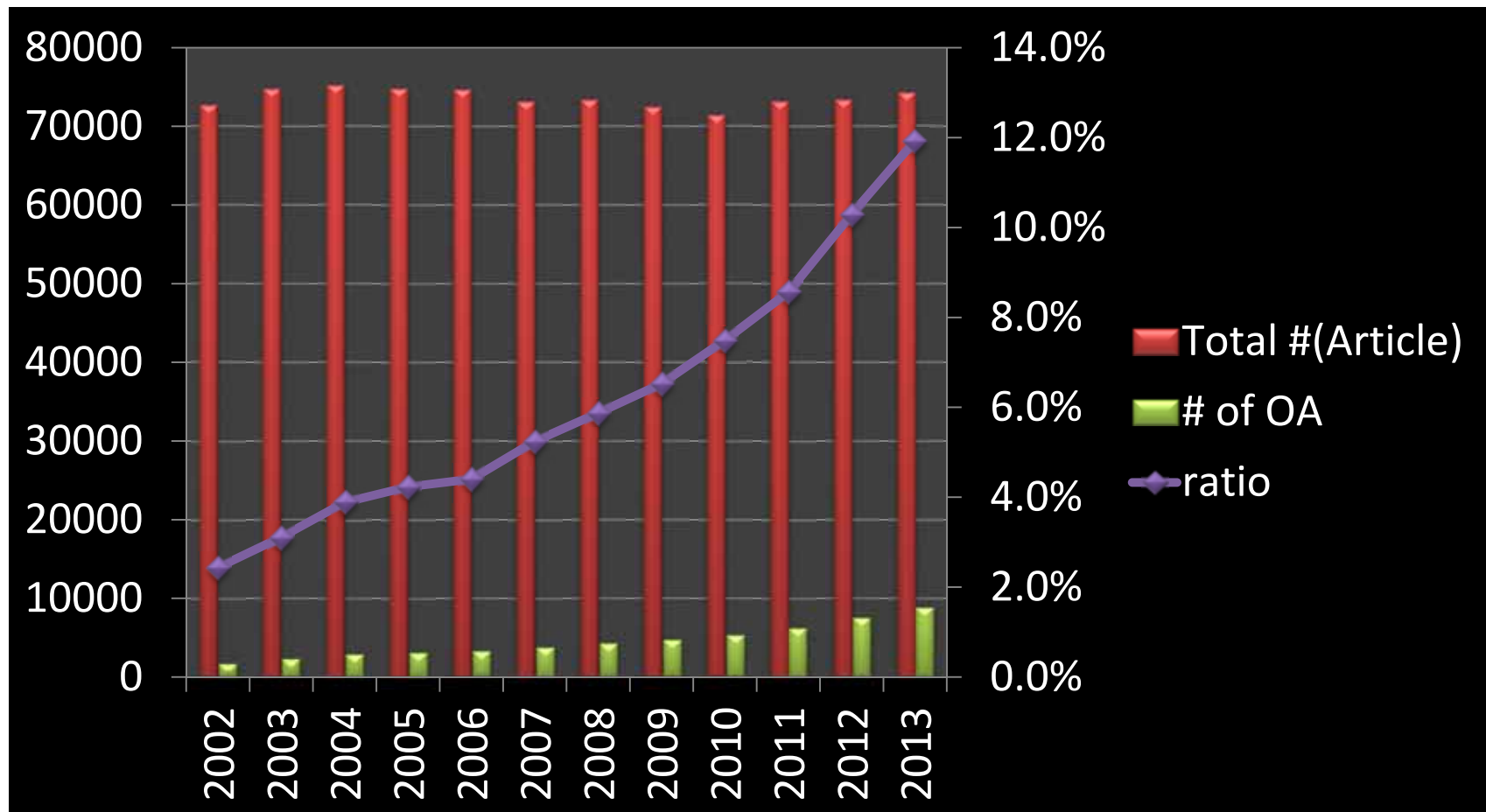
- ❑ Japan's states are unique in some points.
- ❑ There are almost no commercial scholarly publishers that are active in global. Japan's commercial publishers are very domestic and rather conservative. So scholarly publishing in Japan is mostly by learned societies.
- ❑ There are over 1800 societies in this small country. And they publish their own small number of journals. Then they could not take advantage of "scale-merit" which is one of the significant merits of e-journals.
- ❑ Still, Japan Science Technology Agency (JST) has a aggregated platform called J-STAGE. But the number of journals are over 800, smaller than China's one (>3000).
- ❑ One good thing is over 75% of J-STAGE journals provide their journal free of charge, however, it is just free and copyrights are on publishers. (not adopt to Creative Commons)

C) JST challenges for OA mandates



- JST announced a policy of open access for research outputs funded by JST (recommendation) on Apr. 2013
 - Clear state of promotion of OA
 - Annotating IR and J-STAGE as platforms
 - 1 year's embargo
 - Author final version
- JSPS seemed to be silent about this policy.
- Researchers are still indifferent to OA, depending on their research fields
 - OA mandate of dissertations (Mar. 2013) made them aware of OA

Growth of OA articles published by Japanese organizations



Source: web of science

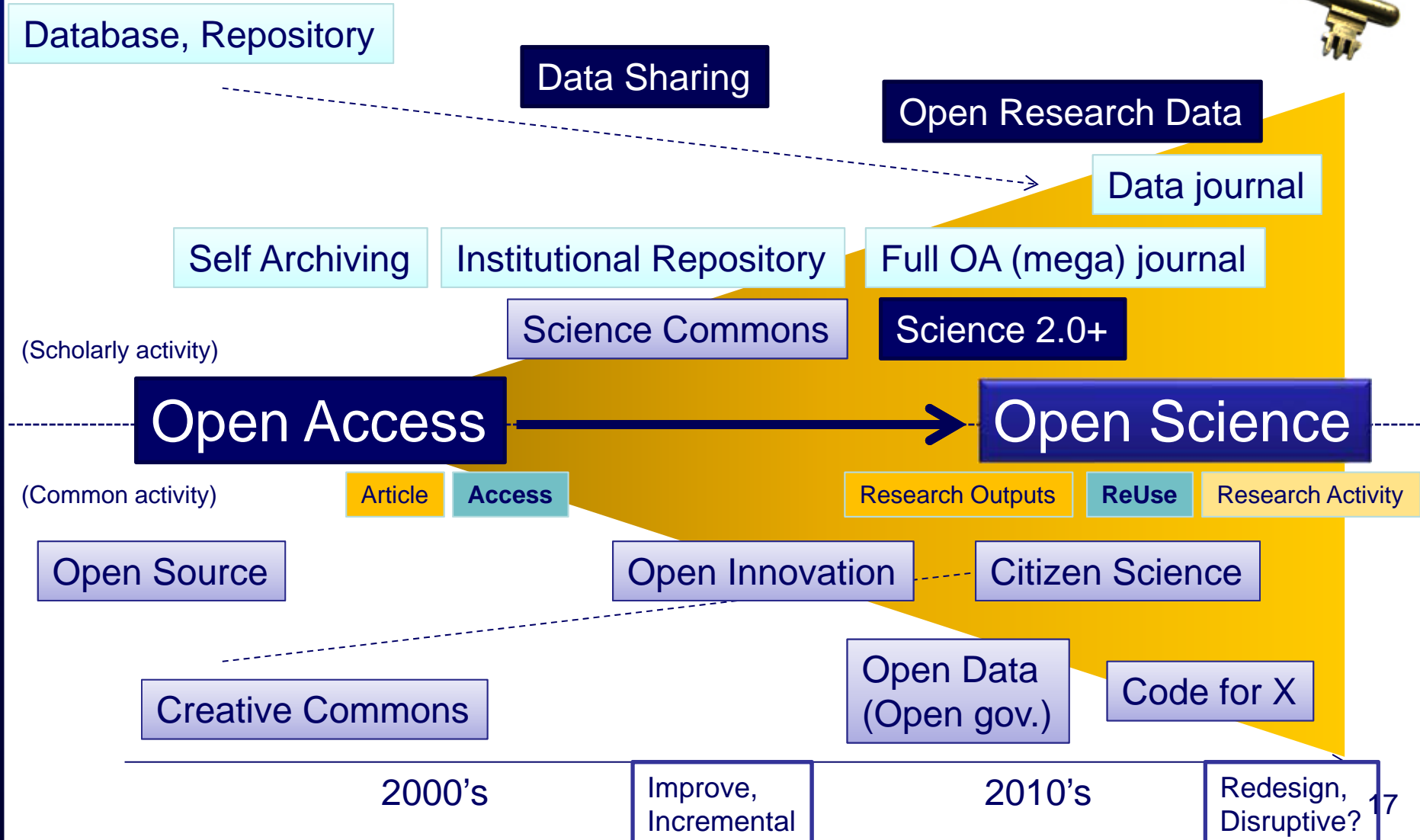
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Open Access to Open Data and Open Science

Overview example



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4. Open Science and the 5th Science and Technology Basic Plan
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Driving Force



Tension and Distortion

- Open Access
 - Serial Crisis → OA mandate
 - Evaluation of Science or Scientists → emerging metrics, new media
- Data Sharing
 - Contribution to making data → Data citation
 - Infrastructure(Data storage) → Developing de-fact standards
- Citizen Science
 - Out-reach, Science and Society, Reliability of Scientist

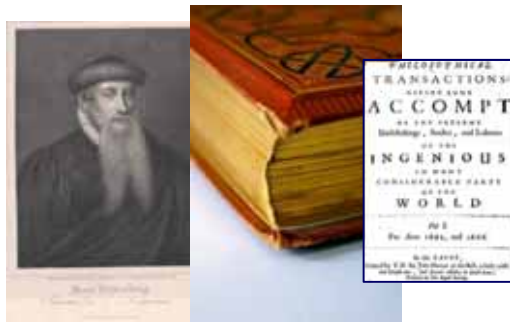
Disruptive or innocent mind

- Younger Generation and other ICT business than established scholarly publishing industry

Learning from the history

• Towards post-Gutenberg's worlds

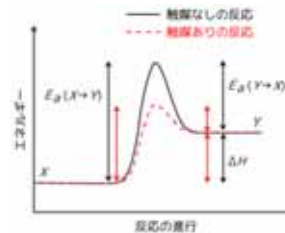
Print based dissemination



Web native dissemination



Transition State



http://commons.wikimedia.org/wiki/File:Activation_energy_ja.svg

Past Design



Future Design

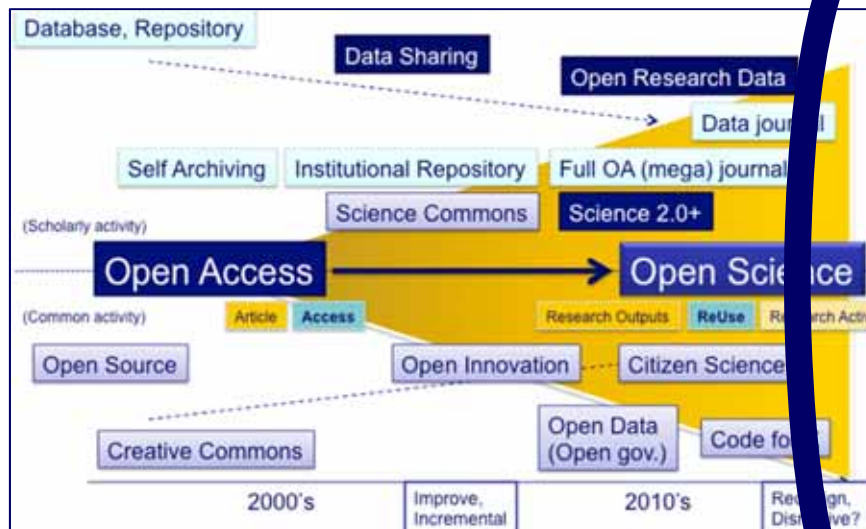


Reinvention of Scholarly activities

K. Hayashi, "Current States of Impact Assessment of Research Outputs in Japan and Some Challenges to Measure New Impacts for Japan's Stakeholders," OECD-ESTONIA WORKSHOP ON IMPACT ASSESSMENT: PRACTICES, TECHNIQUES AND POLICY CHALLENGES, May 15-16 2014, Estonia. (revised)

Vision

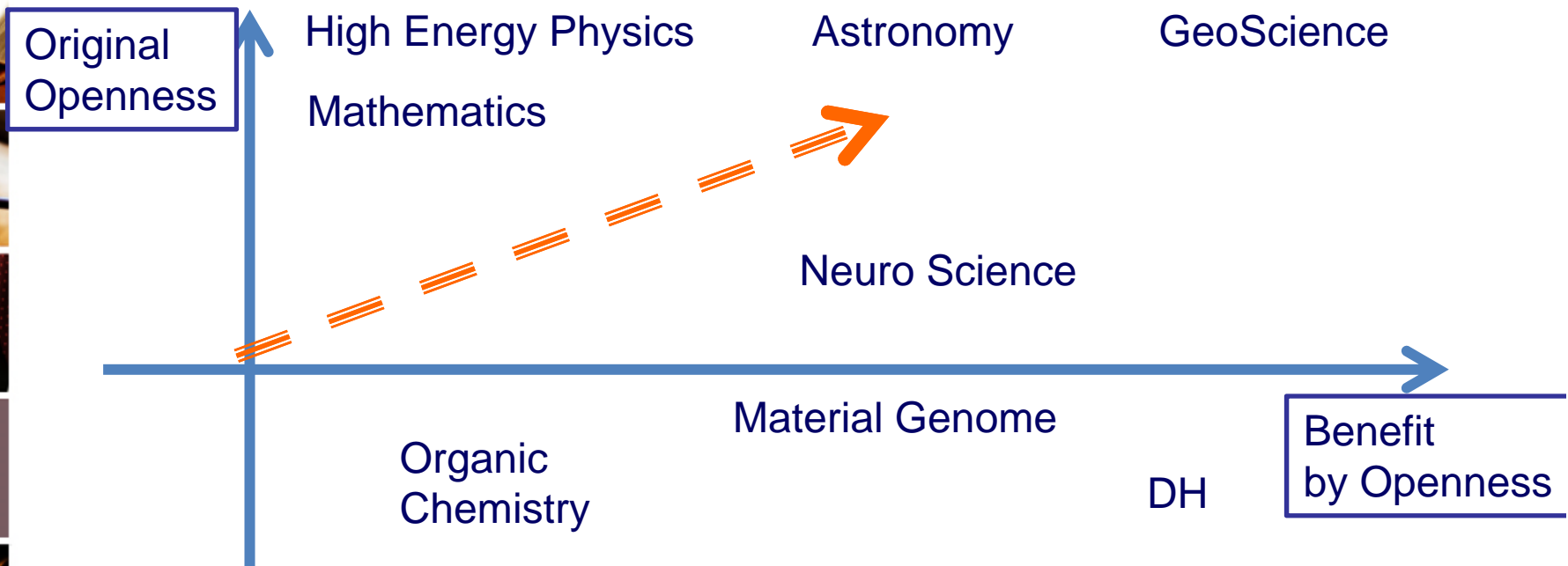
Movement of Open Science



Reconstructing
New Scheme (Game) of
-Scholarly Communication
-Intellectual Property
-Education

Relative Enhancement

- To accelerate researches
- By researchers' motivation (including incentives)
- With healthier frameworks



(a Personal View)



Thank you for your attention

Twitter : hayashi_kaz

Facebook, LinkedIn, Mendeley

Kazuhiro Hayashi (with a picture)