

Open Access in China: Past, Present and Future

Dr. Wang Yingkuan

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Korea: Developments and Trends**

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Speaker

Dr. Wang Yingkuan

PhD of Editing & Publishing at Peking University
Professor, Adviser of Post Doctorate

Visiting Scholar at University of Minnesota (2009-2011)

Executive Editor-in-Chief of Int. J Agric. & Biol. Eng (IJABE)

Associate Editor-in-Chief of Transactions of the CSAE

Associate Editor-in-Chief of Agricultural Engineering Technology

Deputy Director of AE Information Center of CAAE

Executive Board Member of AAAE, AOCABFE

Vice Secretary General and Board Member of CSAE

Member of the ASABE

Email: wangyingkuan@gmail.com

wangyingkuan@163.com

<http://www.ijabe.org>; <http://blog.sciencenet.cn/u/wangyk>



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1 History of open access introduced to China

(1) Cultural context for OA movement in China

- National Bureau of Statistics of China disclosed on Feb.22 of 2013, China's internet population reached **560 million in 2012**, with internet popularizing rate of **42%**, ranking the **first** in the world (followed by USA, India, Japan and Brazil).
- Internet fundamentally transformed the way of using literature and information: More and more people get used to acquire and use literature via internet.
- Researchers and scientists wish quick publication and wide spread of their research results. **Open access (OA) via internet provides a perfect mechanism to meet this need.**
- Therefore, OA grows quickly in China.

1 History of open access introduced to China

(2) Landmarks OA history in China

- Editors, publishers, librarians, IT experts got to know OA first via internet (STM more active than arts & social sci)
- Prof. Zhang Xiaolin, Director of CAS Library, attended Meeting of the Academies of Sciences: OA as a Means to Promote Academic Publishing, Budapest, Hungary on January 16-18, 2003
- In 2004, **China signed Berlin Declaration** on behalf of Chinese government (Chen Yiyu of NSFC) and scholarly community (Lu Yongxiang of CAS)
- In June 2005, CAS sponsored **International Symposium on Strategy and Policy on OA** in Beijing sponsored by CAS National Science Library

1 History of open access introduced to China

(2) Landmarks OA history in China-Continued

- In July 2005, **Wuhan Declaration on cooperation and sharing among university libraries** was signed by over **50 university libraries**
- In 2006, the first **PhD Dissertation on OA publishing** of scientific journals in China by **Dr. Wang Yingkuan** at **Peking University** (2005, the first Master's thesis, OA publishing model for academic journals by Li Wu at PKU)
- From 2007, CAS started large-scale **Institutional Repository (IR) construction---CAS IR Grid**
- In 2008, **IJABE**, a born OA journal, was launched by **Dr. Wang Yingkuan**
- In October 2010, **Berlin 8th OA Conference** was held in Beijing Co-sponsored by **CAS National Science Library** and **Max Planck Research School (MPS)**

1 History of open access introduced to China

(3) Origin of OA---Price and serials crisis

- **Price crisis**

Rising subscription prices because a few journal publishing monopolists

- **Serials crisis**

Reduce or cancel scholarly journal subscription. Thus, libraries subscribe to fewer and fewer journals

- **Scholarly communication crisis**

the loss of access to the scholarly research literature, as the rising costs of journal subscriptions far out-strip institutional library budgets. Unsustainable

- **China is experiencing the same situation as the international community. Therefore, China follows the developing steps of international OA movement**

1 History of open access introduced to China

(4) Scholarly community-Major driving force

- Journal publishers play an active role in driving OA movement. Many subscription-based print journals have been converted to OA via online version, which is a widely-used **hybrid OA model** in China.
- The individuals, universities, research institutes and other organizations play great roles in driving the development of OA archives.
- **It is now the scholarly community (publishers, editors, readers, librarians, scholars, professors, researchers and NGOs), rather than governmental bodies who drives the OA movement in China.**

2 Open access repositories in China

(1) Progress in OA policy and platform

- In 2004, **Science Data Sharing Project** was launched by MOST
- In 2005, China mirror site of arXiv was built (ITP, CASL)
- In 2006, MOST implemented mandatory OA to **Science Data** resulted from public-funded research
- In 2009, CAS financially support its staff to publish in OAJ
- In 2010, CAS Library signed agreement to archive digital resources of BioMed Central permanently
- In 2012, arXiv.org China Service Group was set up

2 Open access repositories in China

(2) Progress of OA repositories in China

- In Jan. 2003, **OA Repository of Library and Information Science** (Disciplinary repository) was developed
- In Aug. 2003, **China Science Papers Online** was set up by MOE
- In Aug. 2003, **Qiji.CN/Eprint** was launched by young volunteers led by Ji Yanjiang at Univ. of Sci & Tech- Beijing (USTB)
- In 2005, **Xiamen University IR** based on DSpace in Chinese version
- **CAS are building 101 IRs** in each institute under **CAS IR Grid** (75 IRs have been completed and are in use)
- **More and more IRs under construction: USTB, Peking Univ., Tsinghua Univ., Zhejiang Univ., Beijing Industrial Univ., Yunnan Univ., Fujian Normal Univ., etc**

2 Open access repositories in China

(3) China's IRs in OpenDOAR (<http://www.opendoar.org>)

- **Total No. of IRs: 33** (2265 on Mar. 12, 2013), with:

26 belonging to institutes of CAS

The rest 7 IRs include: (Xiamen1+HK5+Macau1)

Xiamen University IR (XMU IR)

City University of Hong Kong (CityU IR)

Hong Kong Institute of Education (HKIED Research R)

Hong Kong Polytechnic University (PolyU IR)

HKUST IR

HKU Scholars Hub

UM IR (Macau)

2 Open access repositories in China

(4) China's IRs in ROAR (<http://roar.eprints.org/>)

- Total No. of IRs in China: **85** (3377 on Mar.12, 2013)

81 based on DSpace, with 1 using Open Journal System, 3 using other softwares

77 Research IR, 1 Research multi-IR, 3 Research Cross-IR, 1 e-Journal, 2 e-thesis, 1 Demonstration

77 from mainland China, 7 from Hong Kong, 1 from Macau

Summary: Though not all IRs registered in ROAR and OpenDOAR, the total number of IRs in China is estimated to be about **150**, with about **100 IRs** from CAS.

2 Open access repositories in China

(5) Software systems for IRs in China

Currently, **four kinds of software** are used for IR in China:

- **Open source and free system:** DSpace, Fedora, CDSware, etc.
- **Commercial system:** Documentum, Bepress, Digital Commons by UMI/ProQuest, CONTENT dm by DiMeMa, DRM by Innovative, Open Repository by BioMed Central, etc.
- **Special software system:** eScholarship, JISC IE, Knowledge Bank
- **Hybrid software system:** Vital by VTLs, etc.

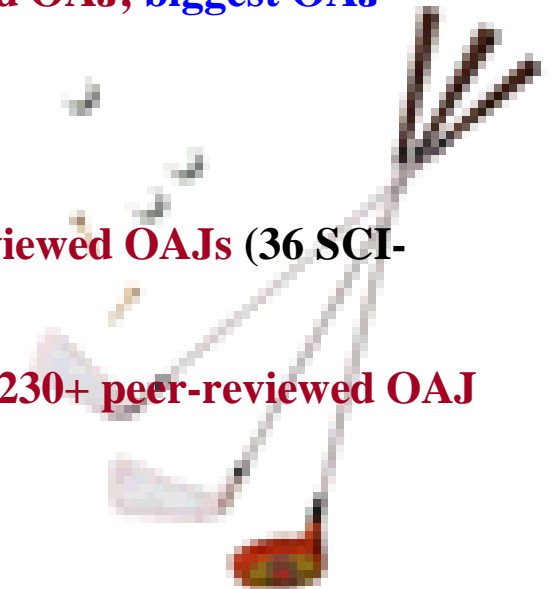
Among them, **DSpace, EPrints, Bepress, OPUS, ETD-db** are most widely used

Four improved Chinese software systems for IRs: Chinese version DSpace, DSpace at Zhejiang University, CDSpace by CAS, CALIS-CHAIR Central

Background

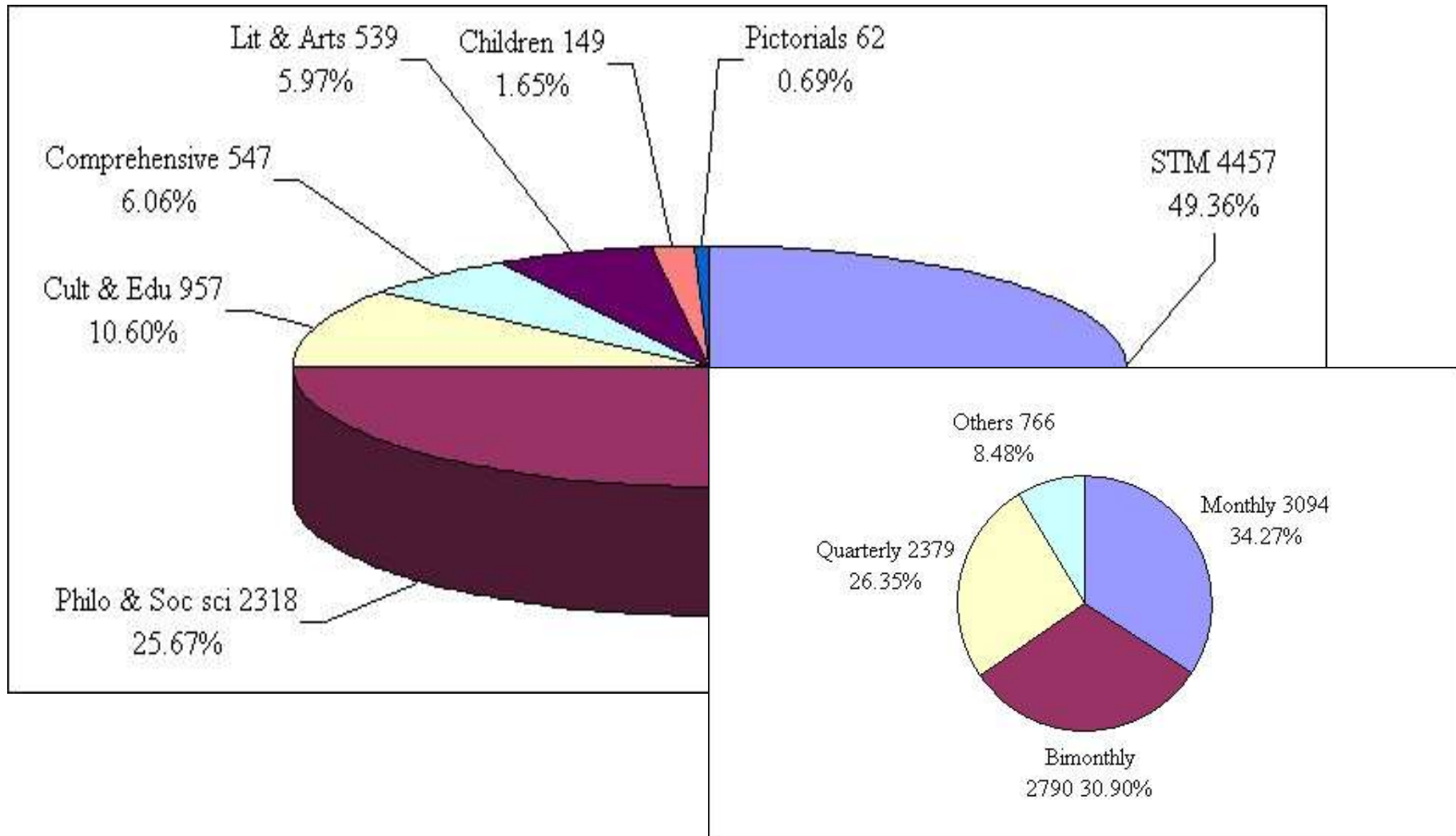
Global View on OAJ: Over 10 000 OAJ in the world

- DOAJ, **8734** OAJ (Mar. 12, 2013), from **122 countries**, **4380** OAJ searchable at article level. Over **1000 OAJ** are indexed by Thomson Reuters WoS (SCI)
- J-Gate (<http://jgate.in/>), **12413 OAJ**, **4045 e-only journals**, **31060** scholarly research & Professional journals, largest journal portal in the world, started in 2001.
- Public Library of Science (PLoS)---**7 high quality OAJ (PLoSOne, biggest OAJ)**
- **BioMed Central (BMC), 250 OAJ, Purchased by Springer**
- **Springer, SpringerOpen publishes over 100 OAJ, 1500 hybrid OAJ, biggest OAJ publisher**
- OUP---publishes **8 OAJ, 90 journals** with OA choice
- Hindawi Publishing Corporation publishes over **499 peer-reviewed OAJs** (36 SCI-indexed)
Bentham-major STM publisher, BENTHAM OPEN publish **230+ peer-reviewed OAJ**
- OMICS Publishing Group---**250+OAJ**



3 Open access journals in China

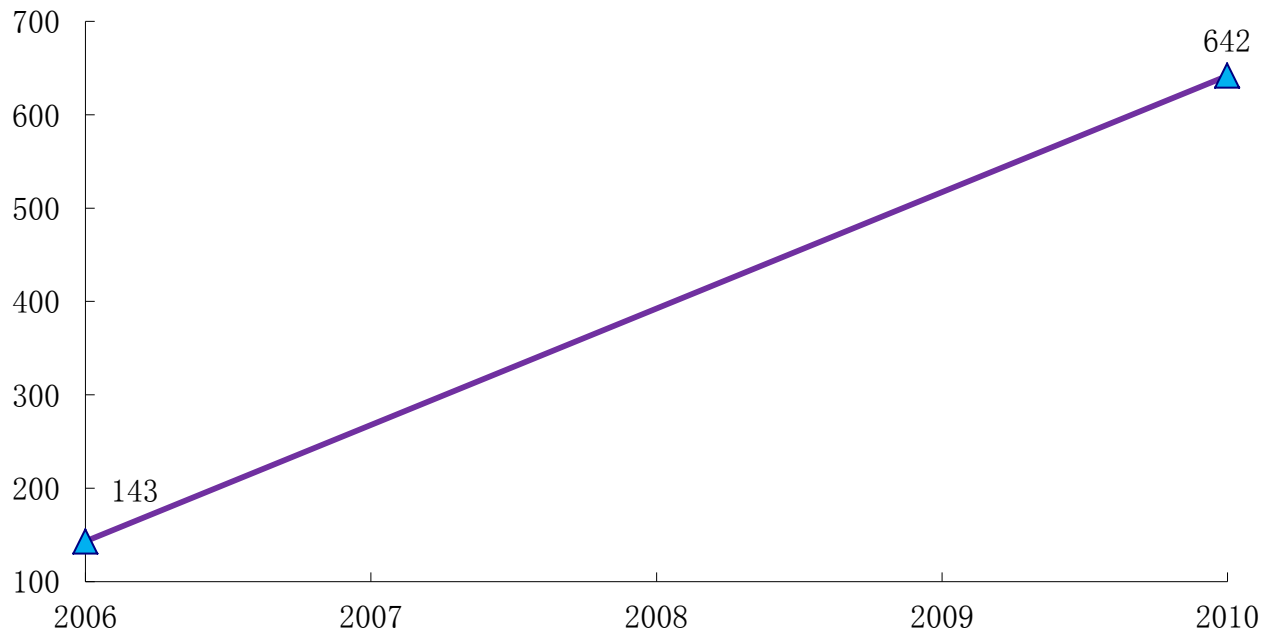
(1) Categories of 9029 journals in China in 2012



3 Open access journals in China

(2) Total No. of OAJ in China reached 1000+

A survey shows 642 OAJ out of 1868 Chinese Sci-Tech Core Journals in 2010



**50% OAJ via self-developed single journal website,
37% OAJ via attaching to a websites of societies,
publishers**

3 Open access journals in China

(3) Some OAJ web platforms in China

- CAS-OAJ: www.oaj.cas.cn, 180 OAJ (5 in Art & Soc Sci)
- Socolar: <http://www.socolar.com/>, 11 739 OAJ from all over the world
- China Medical Net: <http://journal.9med.net/>, over 300 OA medical journals
- OAJIS: <http://www.cujs.com/oajs/>, 40+ OAJ

3 Open access journals in China

(4) Characteristics of OAJ in China

- Most OAJ in China adopt **hybrid model**, converting OA model from traditional TA model with the online version open and print version subscribed
- There are few born OAJ in China (less than 10)
- Most journals in China provide OA to titles and abstracts with 3-6 month delay via Wanfang(6000), CNKI(8800) and VIP(8000) (Partial OA to T&A)
- Most OAJ in China are from STM areas, while not many journals from arts and social science are open except some OAJ in editing & publishing, information and library science.
- Almost all the OAJ in China do not charge extra fees for OA, without additional financial support for OA either
- There are **no copyright policy, access and re-use permit policy** for most OAJ in China, lacking policy and copyright awareness

3 Open access journals in China

(5) Case survey of OAJ in Art and Social Science in China

2 OAJ among 11 Chinese core journals in Editing and Publishing

1. Chinese Journal of Scientific and Technical Periodical (F-OA, website)
2. Science-Technology and Publication (T&A, 3-mon delay, Wanfang Data; F-OA after 6-mon, website) OA accounts for 18% of the total
3. China Book Review (P-OA, Foreword, delay, Longyuan, website)
4. Reading (P-OA, Foreword & contents, delay, Longyuan, website)
5. Editor's Friend (OA to T&A, 3-mon delay, Wanfang Data)
6. Publishing Research (OA to T&A, 3-mon delay, CNKI)
7. China Publishing Journal (OA to T&A, 3-mon delay, CNKI)
8. A Vast View on Publishing (OA to T&A, 3-mon delay, CNKI)
9. Chinese Editors Journal (OA to T&A, 3-mon delay, CNKI)
10. Acta Editologica (OA to T&A, 6-mon delay, Wanfang Data)
11. Editors Monthly (OA, only Foreword, delay, Wanfang)

3 Open access journals in China

(6) Case survey of OAJ in Art and Social Science in China

4 OAJ among 19 Chinese core OAJ in Library and Information Science

1. Library and information service
2. Library Tribune (F-OA)
3. New Technology of Library and information service (F-OA)
4. Journal of Intelligence (F-OA)
5. Journal of Library science in China
6. Journal of the China Society for Scientific and Technical Information
7. Journal of Academic Libraries
8. Library Journal
9. Library
10. Information Science
11. Library Development
12. Information and Documentation Services
13. Information Studies: Theory & Application
14. Library Work and Study
15. Library Theory and Practice
16. Researches in Library Science
17. Library and Information
18. Journal of the National Library of China
19. Document, Information & Knowledge

OAJ accounts for 21% of the total in this sector

Knowledge Management Forum (e-only) , Digital Library Forum

Summary of OAJ in Art and Social Science in China

- Lack OA study and awareness in this sector, less active compared with STM journals
- Hard to adopt author-pays model for social scholarly journals since authors do not pay page charges due to limited fund
- Lifestyle magazines based on subscription business model are not OA
- Low level in digital and website development
- Not many OAJs in A&SS, but most open access to Titles and Abstracts via CNKI, Wanfang and VIP



3 Open access journals in China

(7) Case study on IJABE: A born OAJ in China

- **International Journal of Agricultural and Biological Engineering (IJABE)** was started in 2008 (Beijing Olympics, 5-yr, born OA with online and print version)
- A peer-reviewed international journal, **immediate full OA** at www.ijabe.org

Authors—from over 20 countries and regions, **percentage of international papers in is over 75%**

Readers—from over 80 countries

- A **Sino-US joint journal** sponsored by US-based AOCABFE and CSAE
- Published **19** issues in 6 volumes, with over **190** papers and **800** submissions





IJABE, a fast-growing born OAJ

- **IJABE has been indexed by over 20 famous international indexing and abstracting databases, including Compendex, Scopus, INSPEC, CA, CSA, CABI, ProQuest, EBSCO, AJ, IC, AGRICOLA, AGRIS, Google Scholar, DOAJ, J-Gate, Ulrich PD, Colorado Alliance of Research Libraries-OA Digital Library, OCLC.**
- **IJABE tries donation model to support OA (1M from 30 supporters)**
- **IJABE explores Journal-meeting model to support OA. IJABE solicited submissions and made money by co-sponsoring meetings and organizing delegations with over 400 Chinese experts to attend 13 international meetings in 2010-2012.**
- **IJABE explores new way of starting and running OAJ with great significance, trying various OAJ business model, including author-pays model, donation model, journal-meeting model**

4 Future trend: Critical thinking

(1) Reasons for OA booming in China

- **OA is widely accepted** in China. OA reflects equal information acquisition rights
- Science is **nonprofit** undertaking. OA can make scientific achievements **a public resource**
- In China, STM researchers get used to **pay publication fees** to publish papers, which is in agreement with the **author-pays model adopted by OAJ**
- **OA improves scholarly communication and brings huge benefits** including increasing accessibility, visibility, citations, use & re-use, and impact through removing price, access and use barriers

4 Future trend: Critical thinking

(2) Difference of OA in China

- OAJ adopt **hybrid OA models**, with a few new born OAJ. In western countries, many new-born OAJs were launched
- Non-government actions without OA law
- No national program to promote OA in China so far
- Small scale OAJ and archives in separate ways in China, lacking large-scale and national level OA platforms

4 Future trend: Critical thinking

(3) Benefits of OA in China

- Increase access to research results and **re-use**, improve scholarly communication and research
- Increase journal citations and impact
- Facilitate digital and online publishing
- Offer advantages of web/internet to research sector, good for discovery and innovation
- **OA can maximize the potential**
- **Journal Price Crisis-----Public access to public funded research----Support new internet-based e-education, e-learning and e-research**

4 Future trend: Critical thinking

(4) Barriers for OA development in China

- Lack copyright management awareness and in-depth understanding of OA
- Lack OA law and mandatory OA policy in China
- Lack policy and financial support to OA from government
- Lack enough IRs for self-archiving by authors
- Hard to launch new-born OAJ owing to an examination and approval system in China

4 Future trend: Critical thinking

(5) Issues China is facing

- Formulate OA law and mandatory policy
- Who pay for OA?
 - Economic sustainability
- How to improve the quality and impact of OAJ? Quality control
- Research integrity & copyright management
- National OA platform for OAJ and IRs
 - Permanent archiving
- Global exchange, cooperation, share
 - Interconnected and interoperable

4 Future trend: Critical thinking

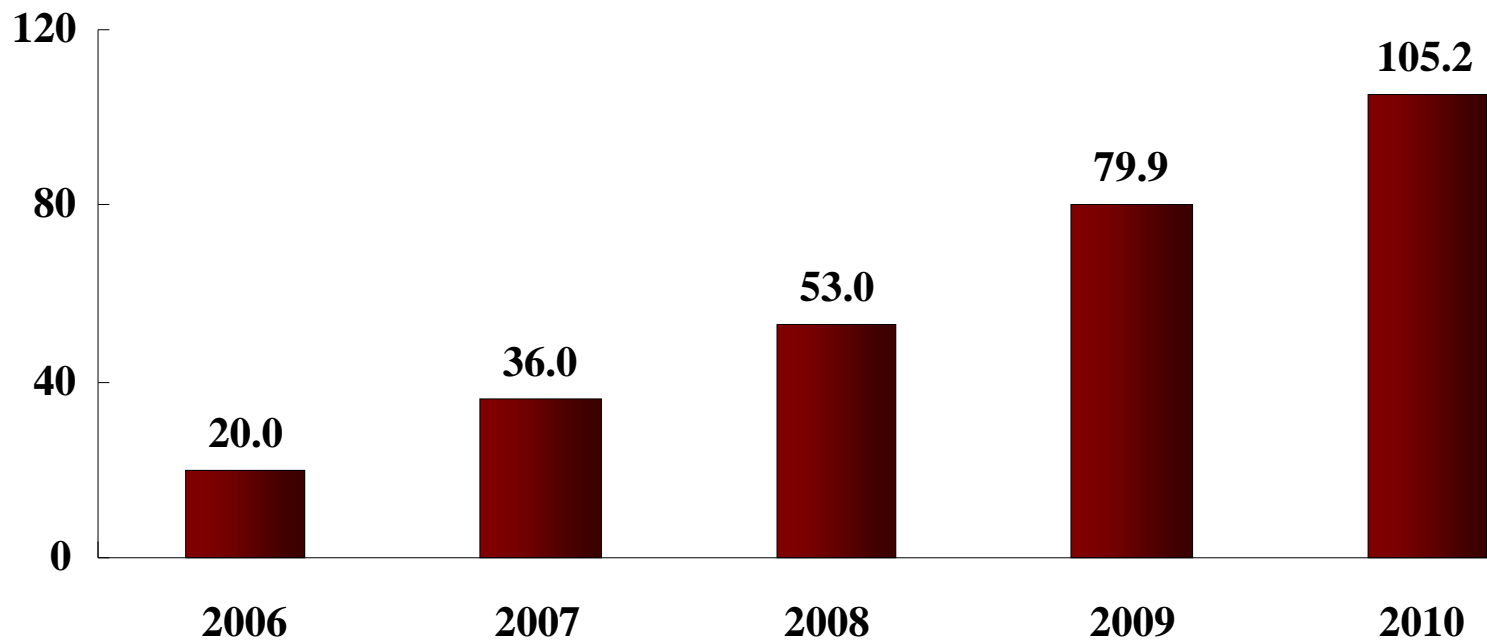
(6) Impetus and prospect

- NSFC, MOST, MOE will support OA
- There will be mandatory OA policy
- The number of OAJ is increasing
- More and more IRs will be developed for permanent archiving
- CAS will play a leading role in both OAJ and IRs

- General Administration of Press, Publication, Radio, Film and Television is re-organized from previous two.
- New opportunity for digital publishing industry (including OAJ)

A rapid development of the Chinese digital publishing industry

Gross income of digital publishing (Billion RMB)

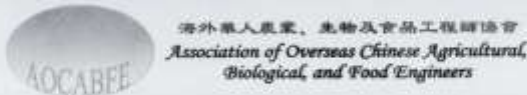


- Experiencing an average annual growth rate of more than 50%

Opportunity VS. Challenge?

- **Opportunity is more than Challenge**
- Now China's OA is entering a new phase where the benefits of OA will become clearer
- Practices show that successful OA publishing requires a focus on quality, integrity and service. Therefore, OA publishers in China will try every possible to improve the three
- **OA will have a bright future in China**

Outstanding International Cooperation Awards and Outstanding Service Awards



Outstanding Service Award

Dr. Yingkuan Wang



American Society of Agricultural and Biological Engineers

Outstanding International Exchange and Cooperation Award

In recognition of

Association of Overseas
Chinese Agricultural,
Biological, and Food
Engineers

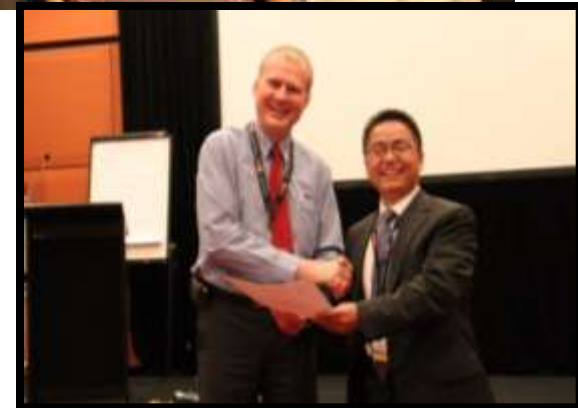


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expresses its sincere appreciation in recognition of outstanding services to

Yingkuan Wang

Executive Board Member, 2010-2012





Thank You!

Questions & Suggestions?



OA advocate, professional editor and publisher
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 450 blog papers with 1.16M visits