

Socratic Dialogue & Springer

Heal-Link, Athens

3 November 2010

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Sales Director Springer

Southern Europe, Russia & Northern Africa

Socratic Monologue & Springer

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Knowledge according to Socrates

- Knowledge is innate (we are born with it)
- Science is discovering what we already know
- The good is knowledge
- Four levels of knowledge:
 1. Philosophical knowledge
 2. Mathematical knowledge
 3. Perception of objects/matter
 4. Images/dreams

- Original reports of data/theory
- Assert priority
- Correspondence between scientists
- Paper making technology (China 105)
- Movable-type printing (China 1040)
- "Gutenberg" printing technology (Korea <1403)
- Silver & gold from America (1492-)
- The two first scientific journals (1665)
 - Philosophical Transactions (London)
 - Journal des Savants (Paris)

PHILOSOPHICAL
TRANSACTIONS:
GIVING SOME
ACCOMPT
OF THE PRESENT
Undertakings, Studies, and Labours
OF THE
INGENIOUS
IN MANY
CONSIDERABLE PARTS
OF THE
WORLD.

Vol I.

For *Anno* 1665, and 1666.

In the SAVOY,
Printed by T. N. for *John Martyn* at the Bell, a little with-
out *Temple-Bar*, and *James Allestry* in *Duck-Lane*,
Printers to the *Royal Society*.

Presented by the Author May. 30th 1667.

LE
JOURNAL
DES
SCAVANS

Du Lundy V. Janvier M. DC. LXV.

Par le Sieur DE HEDOVILLE.



A PARIS,

Chez JEAN CVSSON, rue S. Jacques, à l'ima-
ge de S. Iean Baptiste.

M. DC. LXV.

AVEC PRIVILEGE DV ROY.

(1)

Numb. 1.


PHILOSOPHICAL
TRANSACTIONS.

Monday, March 6. 1667.

The Contents.

An Introduction to this Treat. An Account of the Improvement of Optick Glasses at Rome. Of the Observation made in England, of a Spot in one of the Belts of the Planet Jupiter. Of the motion of the late Comet predicted. The Heads of many New Observations and Experiments, in order to an Experimental History of Cold; together with some Thermometrical Discourses and Experiments. A Relation of a very odd Mousstrous Calf. Of a peculiar Lead-Ore in Germany, very useful for Essays. Of an Hungarian Bolus, of the same effect with the Bolus Armenus. Of the New American Whale-fishing about the Bermudas. A Narrative concerning the success of the Pendulum-watches at Sea for the Longitudes; and the Grant of a Patent thereupon. A Catalogue of the Philosophical Books published by Monsieur de Fermat, Counsellour at Holouic, lately dead.

The Introduction.

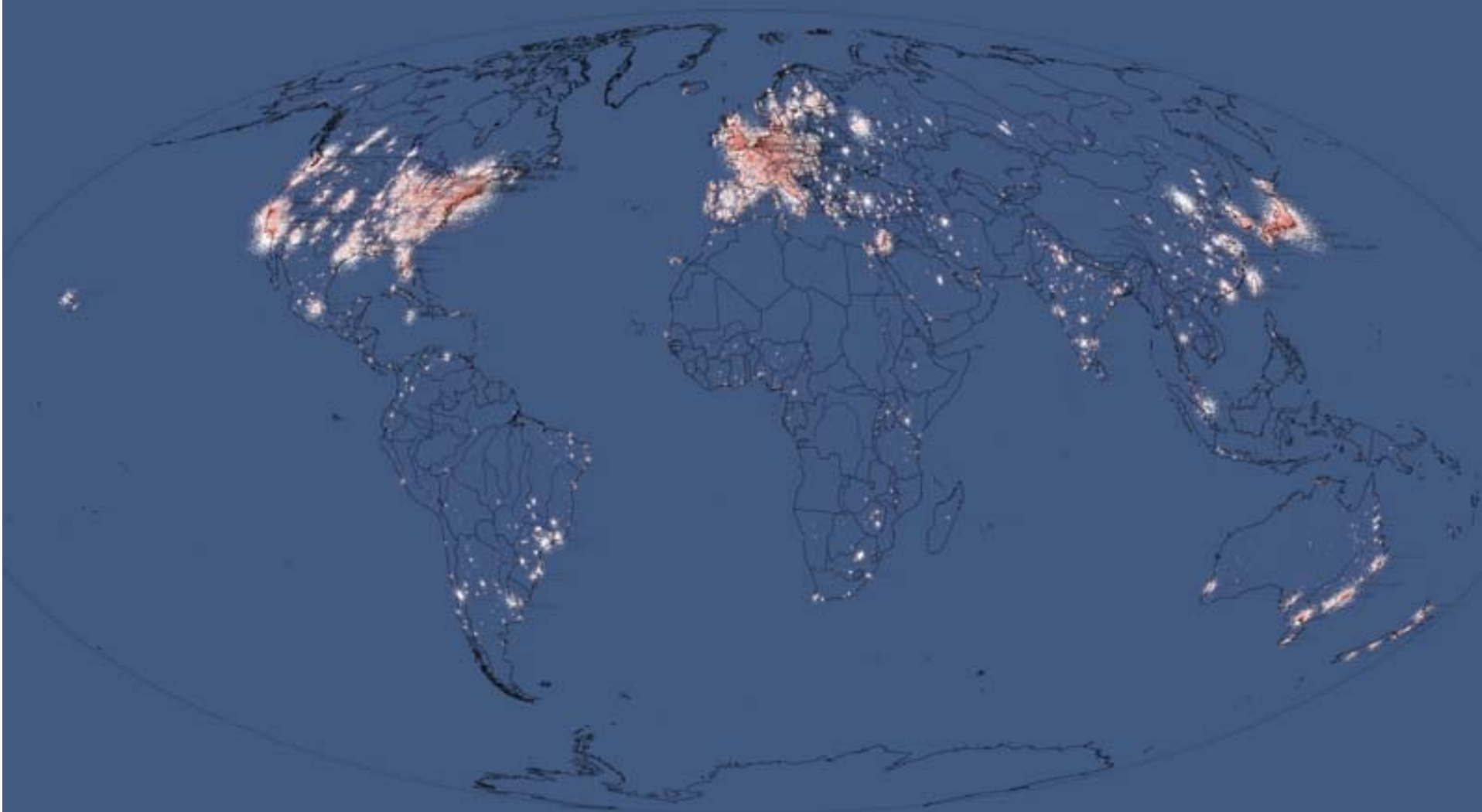
 Hereas there is nothing more necessary for promoting the improvement of Philosophical Matters, than the communicating to such, as apply their Studies and Endeavours that way, such things as are discovered or put in practise by others; it is therefore thought fit to employ the *Press*, as the most proper way to gratifie those, whose engagement in such Studies, and delight in the advancement of Learning and profitable Discoveries, doth entitle them to the knowledge of what this Kingdom, or other parts of the World, do, from time to time, afford, as well

A

of

- Acceleration around 1760
- Since then: doubling every 15-20 years
- (Springer 1842. Politics, agriculture, mathematics)
- 1880: articles often 200-300 pages
- 1920: research split up in many short articles
- Now over 180.000 journals/report series
- Approx 20.000 peer reviewed
- 1.5M peer reviewed articles/year, by 2000 publishers, read by 15M scientists
- 1969 – Internet
- 1989 – WWW
- 1991 – arXiv at LANL
- (SpringerLINK 1997)

GEOGRAPHIC MAP: WHERE SCIENCE GETS DONE



Journal publishing is changing

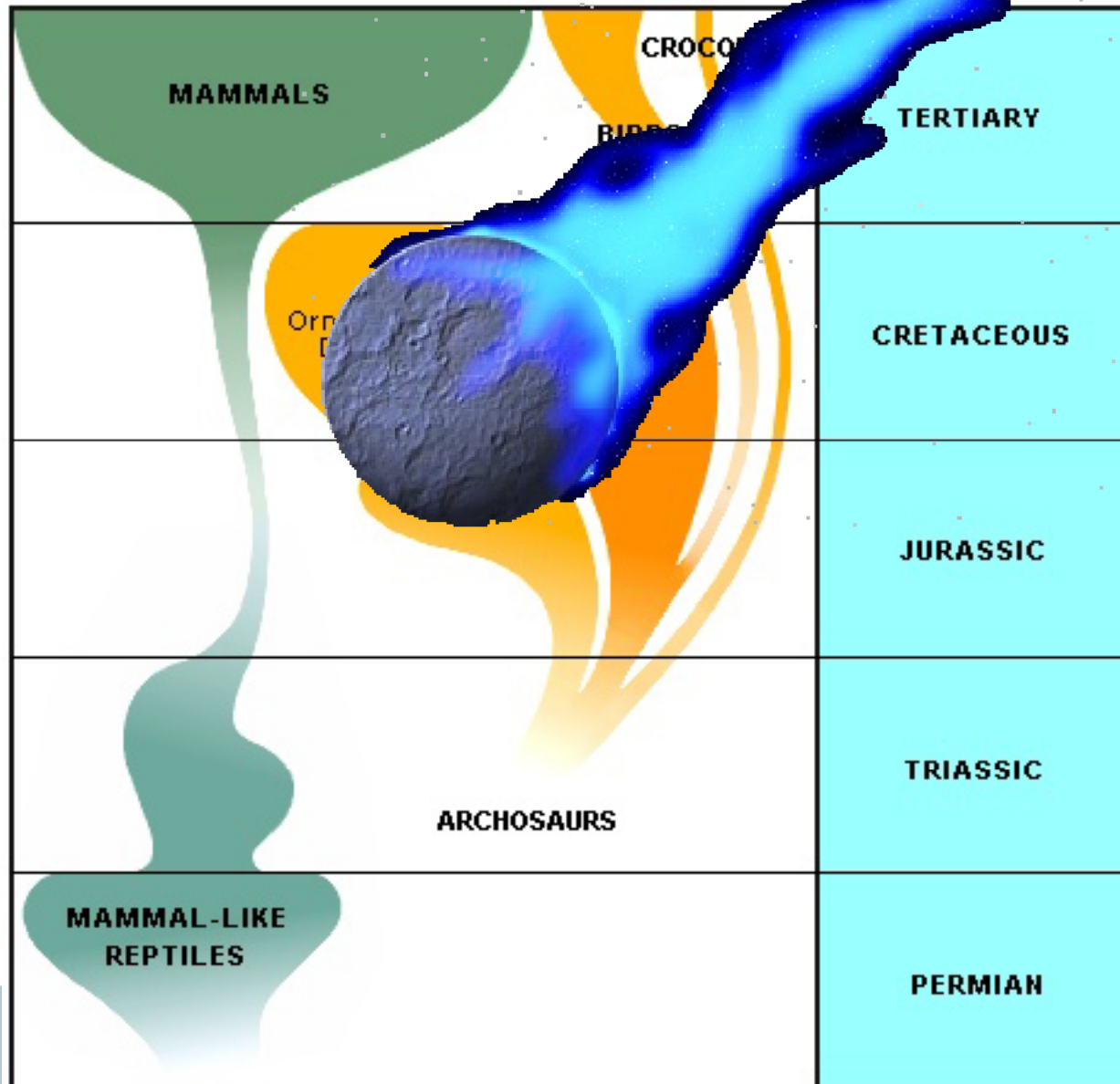
- from print on paper to print on line
- from individual libraries to consortia
- from subscriptions to licences
- from individual titles to collections
- from journal to article

Expectations are also changing

- from selection to comprehensiveness
- from print to electronic
- from textual to multi-media
- from fast to immediate
- from browsing to searching
- from dissemination to formalization
- from reading to mining

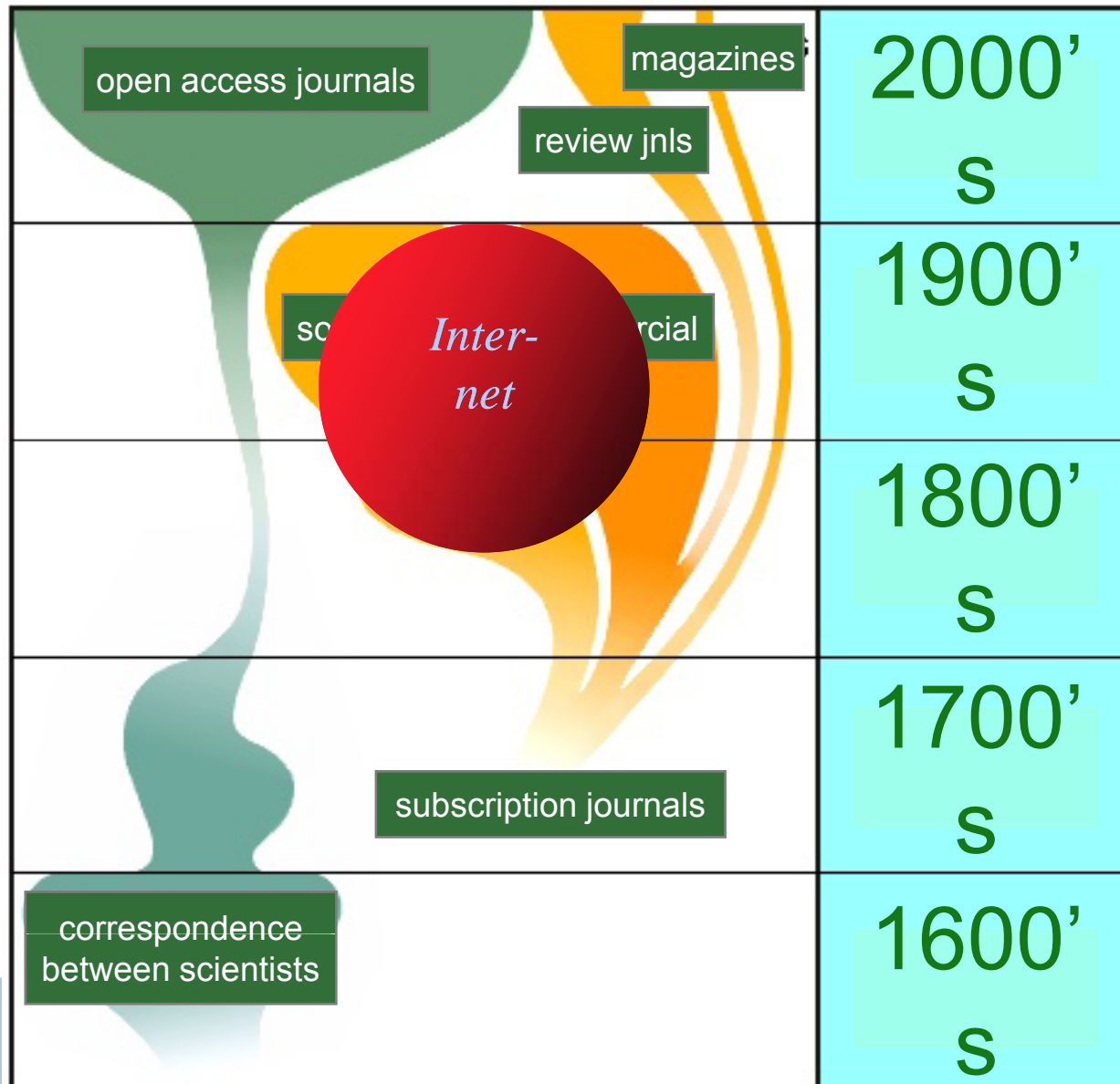
Paleontology as Metaphor

Thanks to Jan Velterop



...for Scientific Publishing

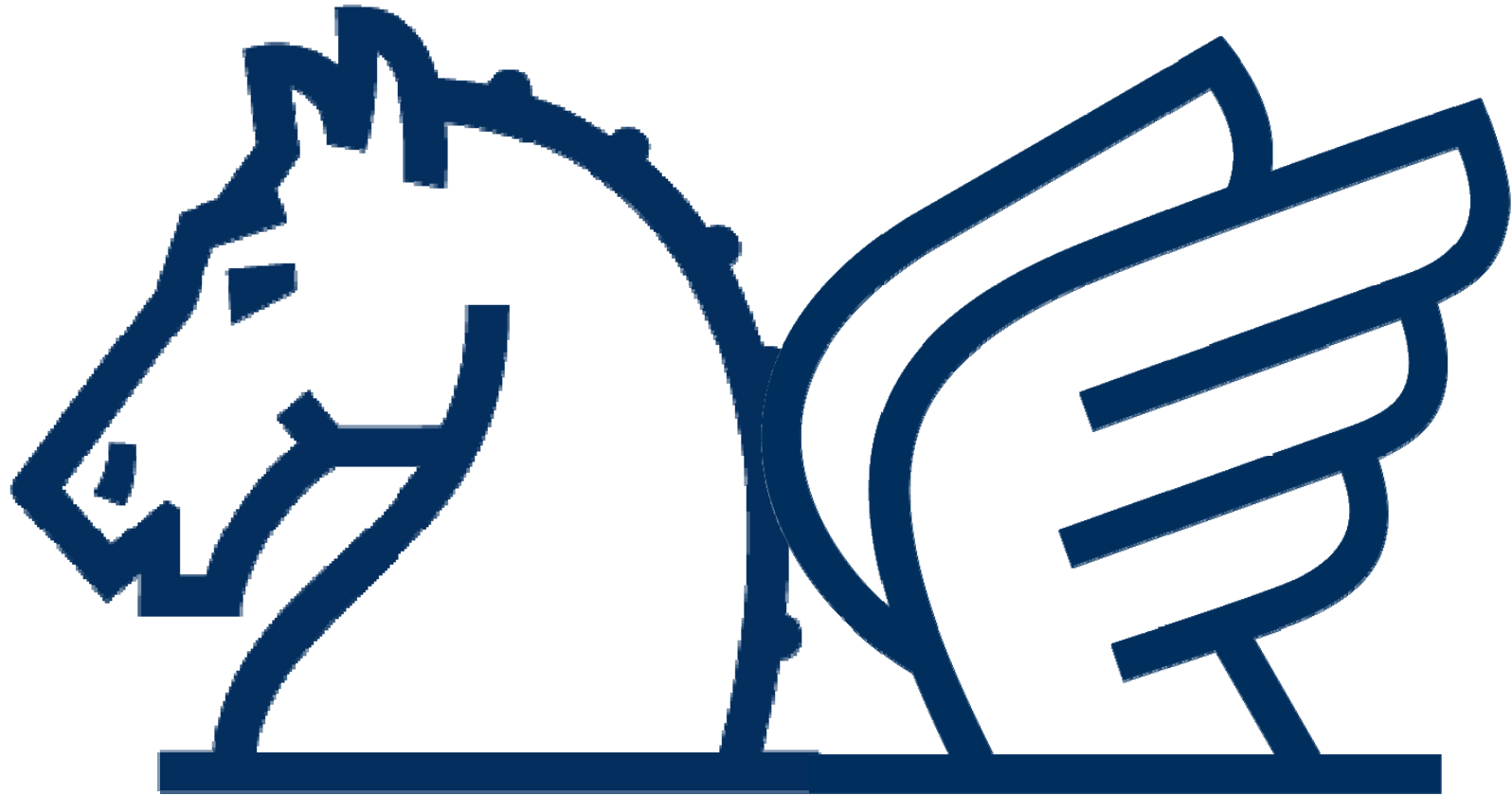
Thanks to Jan Velterop



Darwin:

Not the strongest survive;
not the most intelligent;
not even the most adaptable;
but those *not mis-adapted*.

How to survive?



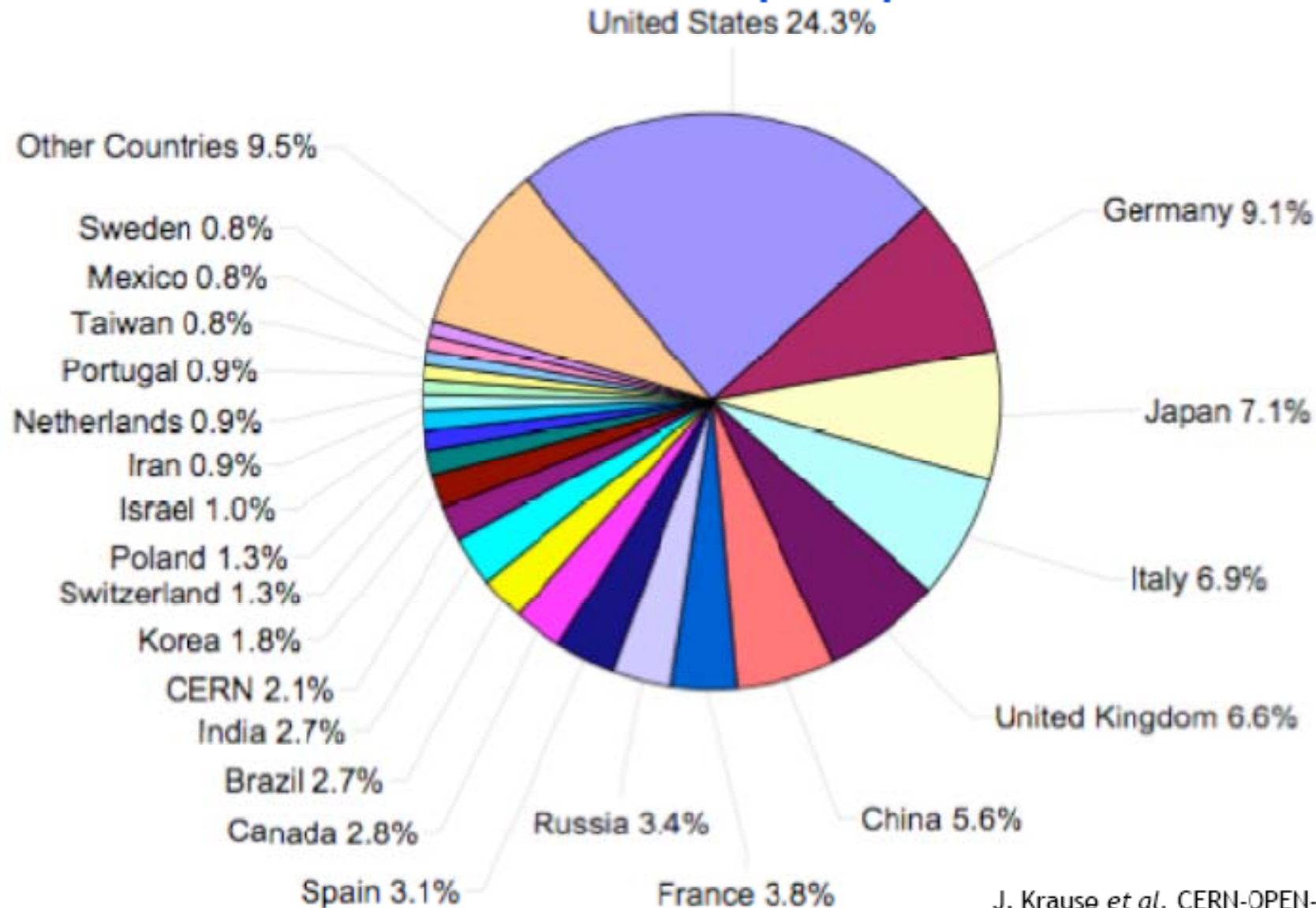
Examples OA Springer

- Biomed Central – Physmath Central
- OpenChoice & SpringerOpen
- Experiments in Germany, Holland, China, etc
- SCOAP3

SCOAP3 --- by country (10Meur)



Fair-share: contribute as per peer-review usage



- Four levels of knowledge:
 1. Philosophical knowledge (structure of the mind)
 2. Mathematical knowledge
 3. Perception of objects/matter
 4. Images/dreams

- Translates to four Springer products!!
 1. Structured search for knowledge – SpringerProtocols
 2. Mathematics – ZMATH
 3. Properties of matter – SpringerMaterials
 4. Images - SpringerImages

- www.springerprotocols.com
- the World's largest collection of life science protocols
- (“kitchen recipes”)
- over 22,000 and growing with over 2,000 per year
- Methods in Molecular Biology
- Methods in Molecular Medicine, etc
- Editor = John M Walker – the creator of the protocol standard
- interactive (web2.0)
- video protocols

- www.zentralblatt-mathematik.org/zmath
- the World's largest and longest running review database in pure and applied mathematics
- years 1824 – now
- over 2,900,000 entries
- over 3,500 journals and 1,100 serials
- over 120,000 new entries per year
- Mathematics Classification Scheme (MSC2000)
- European Mathematical Society

- www.springermaterials.com
- properties of matter – physics /chemistry /material science
- continuation of Landolt-Boernstein (since 1883)
- the “Rolls Royce” of Springer
- over 1,000 editors scanning the World literature
- entries by periodical table, combinations of elements
 - * Particles, Nuclei and Atoms
 - * Molecules and Radicals
 - * Electronic Structure and Transport
 - * Magnetism
 - * Semiconductivity
 - * Superconductivity
 - * Crystallography
 - * Thermodynamics
 - * Multiphase Systems
 - * Advanced Materials
 - * Advanced Technologies
 - * Astro- and Geophysics

- www.springerimages.com
- scientists search for the image, the graph, the table!
- over 2,200,000 images
- all subjects!
- half is medicine / biomedicine
- user-friendly
- easy to export and use images
- allowed! (if not commercial)

ευχαριστώ!