Scientific Discourse in the Digital Era: A Statement

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EGU2015, TM1 Scientific Discourse in the Digital Era: A Panel Discussion
2015-04-14, Vienna

Earth System Science
Data The Data Publishing Journal

www.earth-system-science-data.net

Volume 1 • Number 1 • 2008

Copernicus Publications
The Innovative Open Access Publisher

AWI

Talking Points

- **Open Science**

- **Publishable Objects Multiply**

- **Return for the Taxpayer**

- **Bibliometry as Instrument of Evaluation**

Science as an Open Enterprise, Royal Society 2012

- **Open enquiry has been at the heart of science** since the first scientific journals were printed in the **seventeenth century**. …

- Science's capacity for **self-correction** comes from this openness to scrutiny and challenge.

- **RS take on data:**

  Intelligent Openness

Science as an open enterprise

June 2012

THE ROYAL SOCIETY

Publishable Objects Multiply

- **Standing on the shoulders of …**

- **ESSD, GMD, …**

  - **Data and software require as much scrutiny as interpretations and hypotheses**

- **Data (and software) as a "first class citizen"**

  - **not just supplements**

- **"Open Discussions" as published part of the discourse**

  - **Will the anonymous reviewer (need to) fade away?**

Return for the Taxpayer
(mostly inter-, cross-, ... disciplinary problems)

- **"Jobs and Growths" (EU, Horizon 2020)**

- **Innovation (G8, in the context of Open Data)**

- **The Stakeholder**

  - **Note that the Global Carbon example was sponsored by BNP Paribas and design outsourced**

GLOBAL CARBON ATLAS

The Global Carbon Atlas is a platform to explore and visualize the most up-to-date data on carbon fluxes resulting from human activities and natural processes. Human impacts on the carbon cycle are the most important cause of climate change.

Outreach

Take a journey through the history and future of human development and carbon

Go

Updated with 2013 figures

Emissions

Explore and download global and country level carbon emissions from human activity

Go

Research

Explore and visualize research carbon data, and get access through data providers

Go

Bibliometry as Instrument of Evaluation

- **Will the abuse of bibliometry destroy the scientific discourse?**

  - **The citation is no longer a way to establish the provenance of an insight**

  - **But a way to increase the h-index**

- **There is an "arms race" between bean counters and the pre-tenure scientists**

  - **The "least publishable unit" strategy has no future (made obsolete by the h-index)**

  - **Impact Factor had created a perverse incentive (Nature seeking spectacular articles …)**