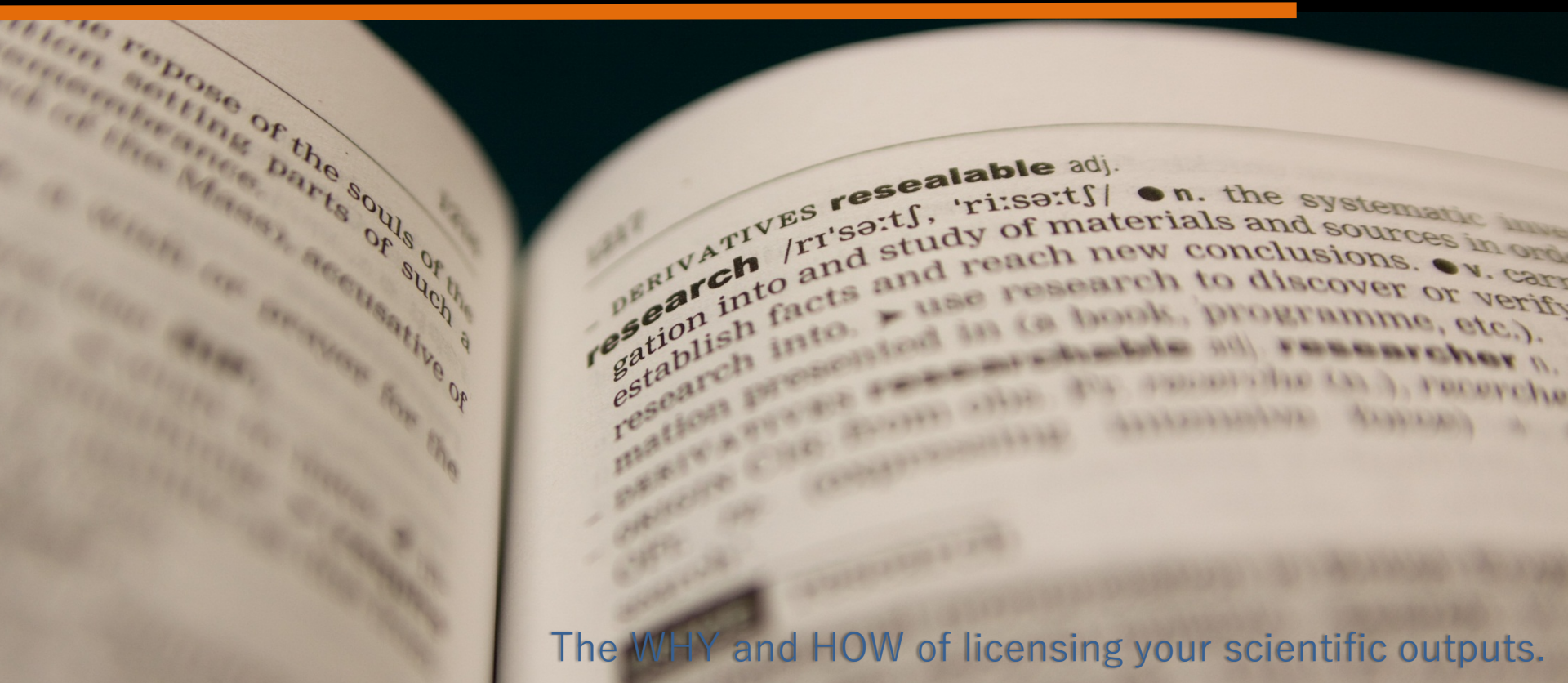


Data, Code & Content Licensing

Facilitating Scientific Reproducibility & Impact



The WHY and HOW of licensing your scientific outputs.

Presentation slides authored by Sophie Kay 2013 (rev. 2015), CC-BY-4.0.

See <http://creativecommons.org/licenses/by/4.0/> for licensing details.

What Will Licensing Achieve?

1

Instil confidence in others as to the terms of reuse

2

Support your own wishes for reuse with a legal declaration

3

Enhance your research impact by fostering reuse of your work and inviting collaboration (stronger research network)

Identify

What materials do you want/need to open up?

License

Legal openness = appropriate
licence

Release

Availability + Ease of download = Technical
openness

Promote

Let people know about your licensed materials

The Three Steps of Licensing

1

Ensure you have permission from all rightsholders

2

Select a licence that is appropriate for your material

3

Declare your chosen licence clearly

- **embed this info into file metatags**
- **include a hyperlink to the license's online listing**
- **If requiring attribution, state the form of citation**

Identify Your Materials

What materials do you want/need to open up?

These will fall into one of three categories:

DATA

CONTENT

CODE

Visit www.opendefinition.org/licenses for a list of Open Definition conformant licenses

The technologically minded amongst you may be interested in machine-readable licenses:
`git clone http://github.com/okfn/licenses`

Visit www.opensource.org/licenses for a list of Open Source Definition conformant licenses

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What is Creative Commons?

Creative Commons is a nonprofit organization that enables the sharing and use of creativity and knowledge through free legal tools.

Our free, easy-to-use [copyright licenses](#) provide a simple, standardized way to give the public permission to share and use your creative work — on conditions of your choice. CC licenses let you easily change your copyright terms from the default of “all rights reserved” to “[some rights reserved](#).”

Wording from creativecommons.org, January 2013 (CC-BY-3.0)

Content Licensing



NC

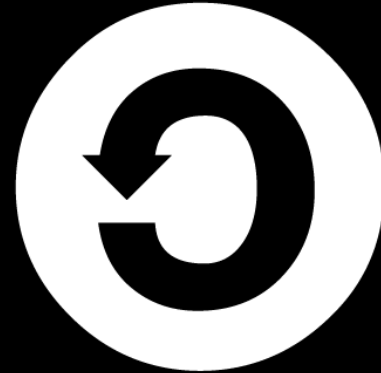
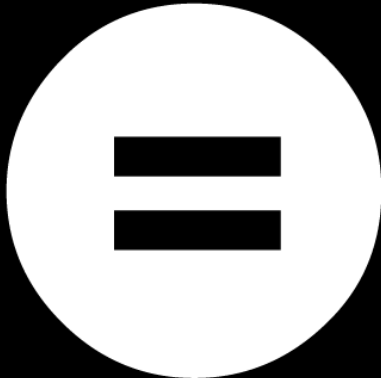
BY

Attribution

No Commercial Use

CC Content Licensing Options

ND



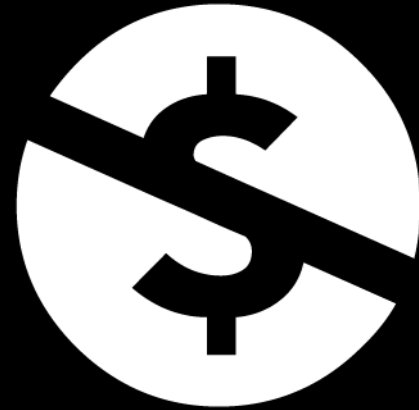
SA

No Derivative Works

Share Alike

“A piece of content or data is **open** if anyone is free to use, reuse, and redistribute it — subject only, at most, to the requirement to attribute and/or share-alike.”

What is openness?



NC

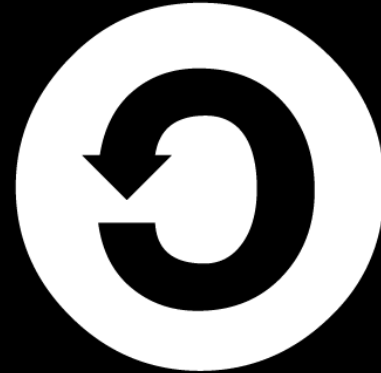
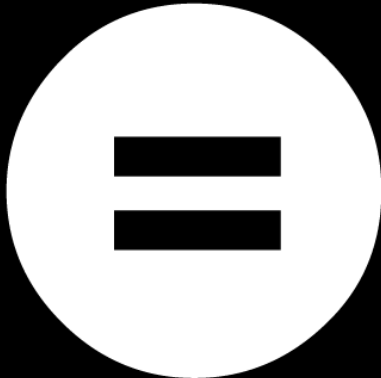
BY

Attribution

No Commercial Use

CC Content Licensing Options

ND



SA

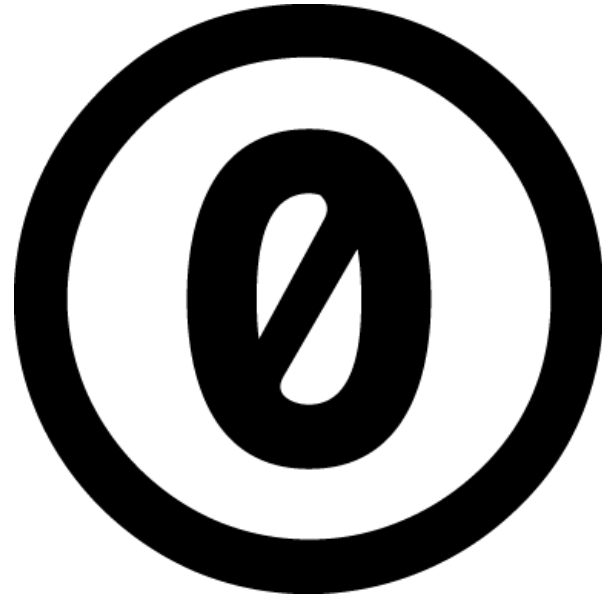
No Derivative Works

Share Alike

CC0

or

CCZero



- **Public domain dedication (to greatest possible legal extent worldwide)**
- **Most open of all licensing arrangements**
- **No one owns rights to the materials**

Public Domain

Data Licensing

Identify Your Materials

What materials do you want/need to open up?

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DATA

CONTENT

CODE

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Visit opensource.org/licenses for a list of Open Source Definition conformant licenses

Data papers, Figshare, DOIs, citable data...

Panton Principles

<http://pantonprinciples.org>

Wording by Peter Murray-Rust, Cameron Neylon, Rufus Pollock, John Wilbanks,
2010-02-09

When publishing data, make an explicit and robust statement of your wishes

1

Use a recognised licence or waiver that is appropriate for data

2

Explicit dedication of data underlying published science into the public domain via PDDL or CCZero is strongly recommended and ensures compliance with both the Science Commons **Protocol for Implementing Open Access Data** and the **Open Knowledge/Data Definition**.

3

If you want your data to be effectively used and added to by others, it should be open as defined by the **Open Knowledge Definition**: in particular, non-commercial and other restrictive clauses should not be used.

4

Code Licensing

Identify Your Materials

What materials do you want/need to open up?

These will fall into one of three categories:

DATA

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CONTENT

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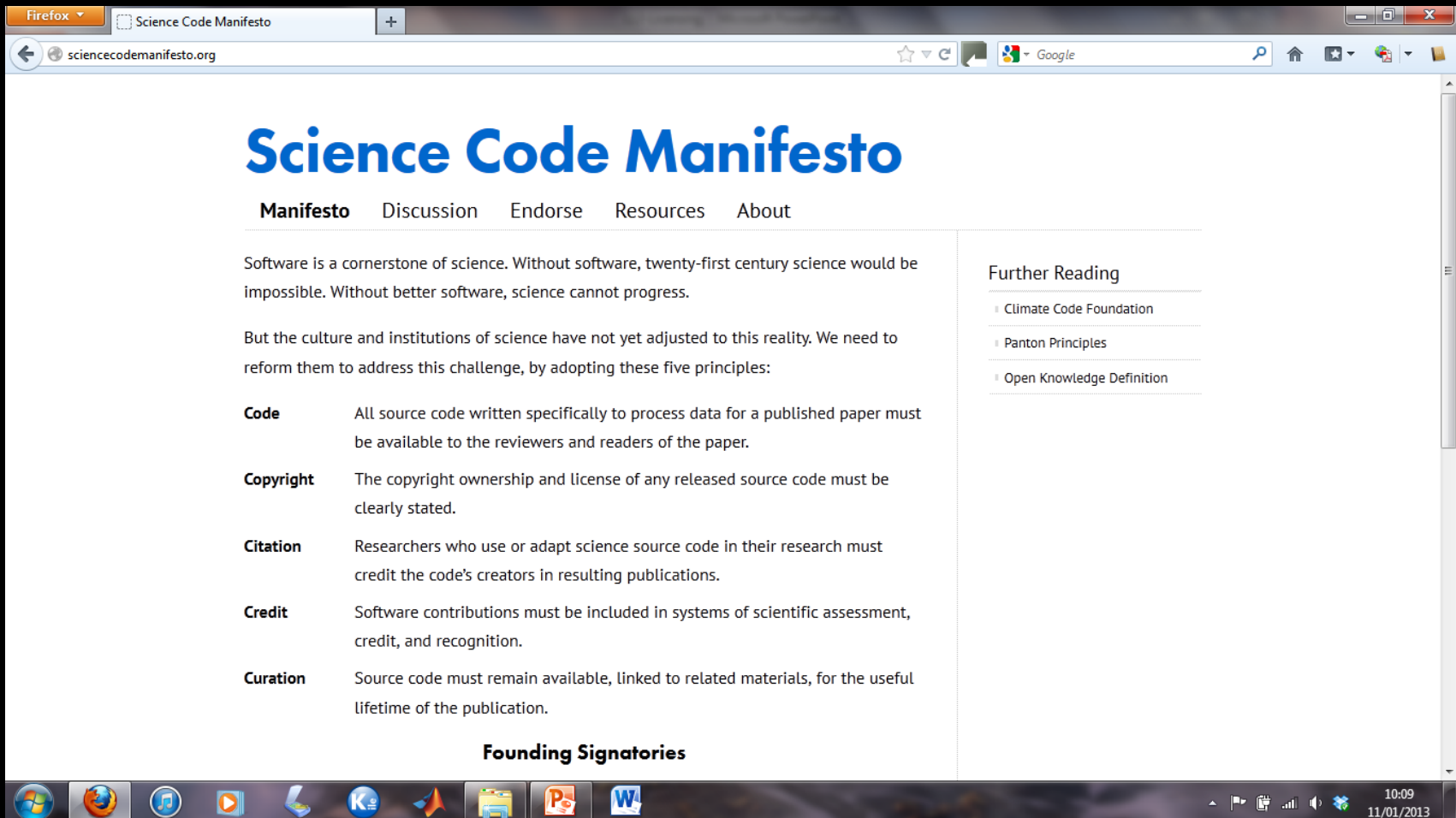
CODE

Visit opensource.org/licenses for a list of Open Source Definition conformant licenses

Pointers for OS Code

- 1** Separate category from data and content
- 2** Licence wording needs to go at the top of each file you upload to GitHub
- 3** The site opensource.org/licenses provides listings and licence wording
- 4** Don't forget to include author names and citation requirements where appropriate

www.sciencecodemanifesto.org



The screenshot shows a Firefox browser window with the address bar displaying "sciencecodemanifesto.org". The page title is "Science Code Manifesto". The main heading is "Science Code Manifesto" in a large blue font. Below the heading is a navigation menu with links for "Manifesto", "Discussion", "Endorse", "Resources", and "About". The "Manifesto" link is selected. The main content area contains the following text:

Software is a cornerstone of science. Without software, twenty-first century science would be impossible. Without better software, science cannot progress.

But the culture and institutions of science have not yet adjusted to this reality. We need to reform them to address this challenge, by adopting these five principles:

- Code** All source code written specifically to process data for a published paper must be available to the reviewers and readers of the paper.
- Copyright** The copyright ownership and license of any released source code must be clearly stated.
- Citation** Researchers who use or adapt science source code in their research must credit the code's creators in resulting publications.
- Credit** Software contributions must be included in systems of scientific assessment, credit, and recognition.
- Curation** Source code must remain available, linked to related materials, for the useful lifetime of the publication.

Below the principles is a section titled "Founding Signatories".

On the right side of the page, there is a "Further Reading" section with the following links:

- Climate Code Foundation
- Panton Principles
- Open Knowledge Definition

The browser's taskbar at the bottom shows various application icons and the system tray with the time "10:09" and date "11/01/2013".

And finally...

Licensing for Phase 1 & 2

- 1** Discuss in your groups the licensing options available to you
- 2** Select appropriate licences for your code, your data and your content
- 3** Implement your chosen licenses
- 4** Your materials will need to be sufficiently open for your successors to build on them in this Assessment

Useful Tools and Sites

General Examples

A few familiar sites may make a bit more sense now:

- [Flickr](#)
- [YouTube](#)

Data and/or Content Licensing

Lists of Open Definition conformant licenses: www.opendefinition.org

Open Data Handbook: <http://opendatahandbook.org/>

Content Licensing

Creative Commons licence selection tool: <http://creativecommons.org/choose/>

Licences for open source code

Lists of Open Source Definition conformant licenses: <http://opensource.org/licenses>

e.g. GNU General Public Licence

- Users must cite you, and explicitly state when they have modified the code;
- The licence delivers legal permission to use and copy the code.