What is metadata?
What is metadata? And what can it do for me?
The Voyager Space Programme

In 1977 NASA launched 2 Voyager spacecraft

Their mission – to send back scientific information about deep space

Voyager 1 is now farther away from earth than any man-made object has ever been
Aliens

In case the Voyagers were found by aliens, each craft containing greetings in many languages, films and pictures and sounds of earth.
But…

How would an alien even know what a record was? How would they even know how to play it?

The answer is **METADATA**
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

1. The speed the record should play at
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

2. The position (horizontal)
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

3. The types of video waves on the record
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

4. What the first video frame should look like
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

5. Where our sun is located
The Voyager Gold Records

On the cover of the record are eight diagrams they explain:

6. Where the time-code on the recordings should be de-coded
Metadata

All this information is metadata, or data about data. Other examples of metadata are:

**Book Metadata**

SUBJECT
Metadata

All this information is metadata, or data about data. Other examples of metadata are:

**Book Metadata**

**AUTHOR**
Metadata

All this information is metadata, or data about data. Other examples of metadata are:

**Book Metadata**

PUBLISHER
Metadata

All this information is metadata, or data about data. Other examples of metadata are:

**Book Metadata**

- **Language**
Metadata

GENRE

CLASSICAL

Music CD Metadata

Brandenburg Concertos
Metadata

COMPOSER

Music CD Metadata

Classical

Brandenburg Concertos

J.S. Bach
Metadata
Metadata

Brandenburg Concertos
EDINA record label
Recorded in London
J.S. Bach
Dataset Metadata

<table>
<thead>
<tr>
<th>April</th>
<th>2001</th>
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<td>22</td>
<td>23</td>
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<td>29</td>
<td>30</td>
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Every 10 years since 1801, the UK has reserved a day for the Census
Dataset Metadata

Data about every person in every household are gathered
The 2001 Census gathered data about 60 million people in 24 million households.

<table>
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<tr>
<th>Area</th>
<th>Age Group</th>
<th>Total: 31,595</th>
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<tbody>
<tr>
<td>Glasgow</td>
<td>0 - 4 years</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dataset Metadata

To use a census dataset you need metadata such as date, area type and theme.
Dataset Metadata

Photographic Metadata

- PHOTOGRAPHER
- DATE
- SUBJECT
- LOCATION
Why Have Metadata?
Why Have Metadata?

Metadata helps you find things
Why Have Metadata?

You look by band name in a music store
Why Have Metadata?

You look by author in a bookstore.
Why Have Metadata?

You look by genre when renting a film.
Why Have Metadata?

Metadata helps you to ask permission

Can I use this photo? Yes you can!

You can ask a photographer if you can reproduce their photograph.
Why Have Metadata?

Metadata helps you to ask permission

Can I use this record? Yes you can!

You can ask a record label for permission to use a sample from a recording.
Examples of Using Metadata on the Web

Searching for CDs by band in an online music store

green (band) = METADATA
blue (CDs) = DATA
Examples of Using Metadata on the Web

Looking for **books** by **author** on your library catalogue

green (author) = METADATA
blue (books) = DATA
Examples of Using Metadata on the Web

Looking for photographs by subject on a photo-sharing site

- green (subject) = METADATA
- blue (photographs) = DATA

- snapz.com
- Mysnapz.com
- Organise
- Groups
- Browse

Search Photographer: [Input Box] [Go]
Examples of Using Metadata on the Web

Looking for films by actor on a movie database

green (actor) = METADATA
blue (films) = DATA
Examples of Using Metadata on the Web

So why should I create metadata for my work?
If you create something that is stored electronically, you want others to find it, and perhaps to say 'hey, thanks, this was useful'.
Examples of Using Metadata on the Web

If you put photos on the web you could add metadata such as subject and photographer.
Examples of Using Metadata on the Web

Here's an example. If you take pictures of strange fish not everyone will know what they are or do.
Examples of Using Metadata on the Web

If you add metadata about your work it will help others to find it, and avoid the following scenario...
1.

Joe flies to the Indian Ocean
2.

Waits 4 months to take a picture of strange fish…
Joe flies home with his picture
4. Emily

Ooh - I had a picture of strange fish, why did you fly all the way out there?

5. Joe (who has now spent all of his 3 year research grant on 1 photo)
Joe spending his grant more fruitfully in the lab
Why should you create metadata for your work?

Your work will be more readily available because:
- It’s easier to find
- It’s clear who created it
- It’s easy for others to cite in their publications
- If everybody creates metadata, you save time and money too!

It also meets the requirements of some funding bodies to make your work readily available for others.
Metadata is data about data! More information about metadata is available on the internet.

The Wikipedia definition of metadata is extensive and includes likes to other resources [http://en.wikipedia.org/wiki/metadata](http://en.wikipedia.org/wiki/metadata)


Michael Day’s article *Metadata in a nutshell* is a good, brief introduction to metadata and metadata standards. [http://www.ukoln.ac.uk/metadata](http://www.ukoln.ac.uk/metadata)
THE END

http://edina.ed.ac.uk/