# Working with Data using OpenRefine

Owen Stephens



#### Schedule

- Introduction to OpenRefine (slides)
- Basic OpenRefine functions I (demonstrations and follow-along)
- Basic OpenRefine functions II (demonstrations and follow-along)
- Advanced OpenRefine functions (demonstrations and follow-along)

#### "a tool for working with messy data"

## OpenRefine can help when...

- you have data in a simple tabular format
- there are inconsistencies in how the data is formatted
- there are inconsistencies in where data appears
- there are inconsistencies in terminology used in the data

#### OpenRefine can help you...

- Get an overview of a data set
- Resolve inconsistencies in a data set
- Help you split data up into more granular parts
- Match local data up to other data sets
- Enhance a data set with data from other sources

| Data you have    | Desired data |
|------------------|--------------|
| 1st January 2014 | 2014-01-01   |
| 01/01/2014       | 2014-01-01   |
| 2014-01-01       | 2014-01-01   |
| Jan 1 2014       | 2014-01-01   |

| Data you have | Desired data |
|---------------|--------------|
| London        | London       |
| London]       | London       |
| London,]      | London       |
| london        | London       |

| Data you have                                                                                                                          | Desired data                |                                      |                      |           |             |                  |                   |          |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------|----------------------|-----------|-------------|------------------|-------------------|----------|
|                                                                                                                                        | Institution                 | Library name                         | Address 1            | Address 2 | Town/City   | Region           | Country           | Postcode |
| University of Wales,<br>Llyfrgell Thomas Parry<br>Library, Llanbadarn Fawr,<br>ABERYSTWYTH,<br>Ceredigion, SY23 3AS,<br>United Kingdom | University of<br>Wales      | Llyfrgell<br>Thomas Parry<br>Library | Llanbadarn<br>Fawr   |           | Aberystwyth | Ceredigion       | United<br>Kingdom | SY23 3AS |
| University of Aberdeen,<br>Queen Mother Library,<br>Meston Walk,<br>ABERDEEN, AB24 3UE,<br>United Kingdom                              | University of<br>Abderdeen  | Queen Mother<br>Library              | Meston Walk          |           | Aberdeen    |                  | United<br>Kingdom | AB24 3UE |
| University of Birmingham, Barnes Library, Medical School, Edgbaston, BIRMINGHAM, West Midlands, B15 2TT, United Kingdom                | University of<br>Birmingham | Barnes<br>Library                    | Medical<br>School    | Edgbaston | Birmingham  | West<br>Midlands | United<br>Kingdom | B15 2TT  |
| University of Warwick,<br>Library, Gibbett Hill<br>Road, COVENTRY, CV4<br>7AL, United Kingdom                                          | University of<br>Warwick    | Library                              | Gibbett Hill<br>Road |           | Coventry    |                  | United<br>Kingdom | CV4 7AL  |

| Data you have                   | Date of Birth from VIAF (Virtual International Authority File) | Date of Death from VIAF (Virtual International Authority File) |
|---------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|
| Braddon, M. E. (Mary Elizabeth) | 1835                                                           | 1915                                                           |
| Rossetti, William<br>Michael    | 1829                                                           | 1919                                                           |
| Prest, Thomas<br>Peckett        | 1810                                                           | 1879                                                           |

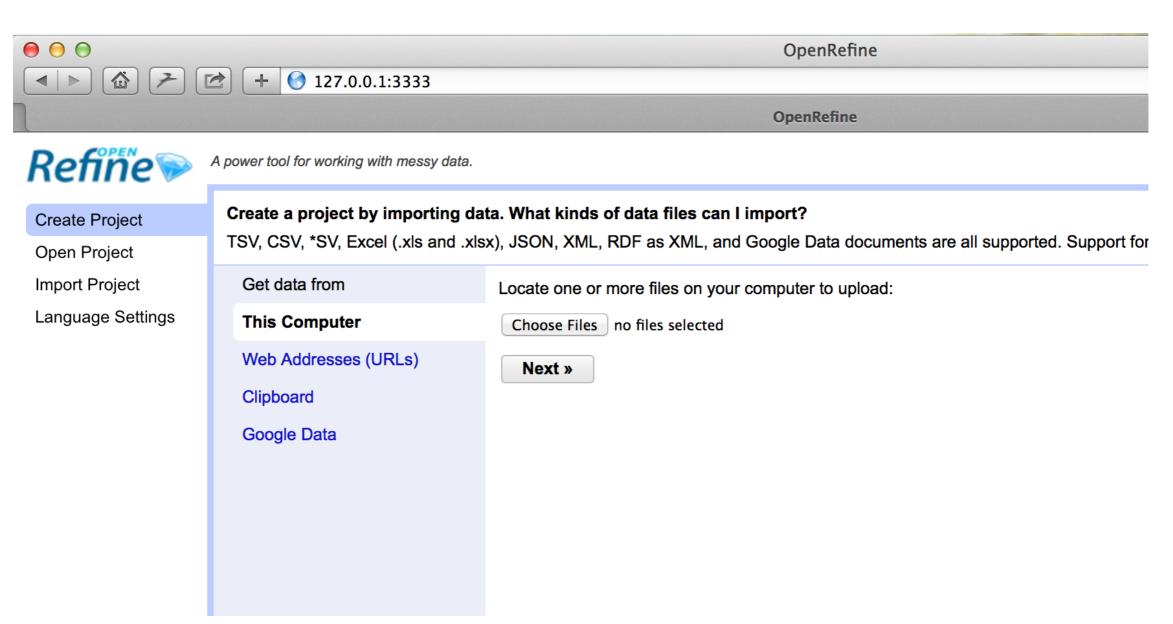
#### Getting help

- The OpenRefine Wiki https://github.com/ OpenRefine/OpenRefine/wiki
- The 'Free your metadata' site <a href="http://">http://</a>

   freeyourmetadata.org/ and book <a href="http://">http://</a>

   book.freeyourmetadata.org
- The OpenRefine mailing list and forum <a href="http://groups.google.com/d/forum/openrefine">http://groups.google.com/d/forum/openrefine</a>

#### Start using OpenRefine



# Demonstrations and follow-along

Download file from: <a href="http://bit.ly/lc-wk4-data">http://bit.ly/lc-wk4-data</a>

#### Using these slides

These slides were developed by Owen Stephens (owen@ostephens.com) on behalf of the British Library.

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