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OpenRefine + Wikidata = Magic

A tutorial

Asaf Bartov
Wikimedia Foundation

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01 What is OpenRefine?

And why do I need it in my life?

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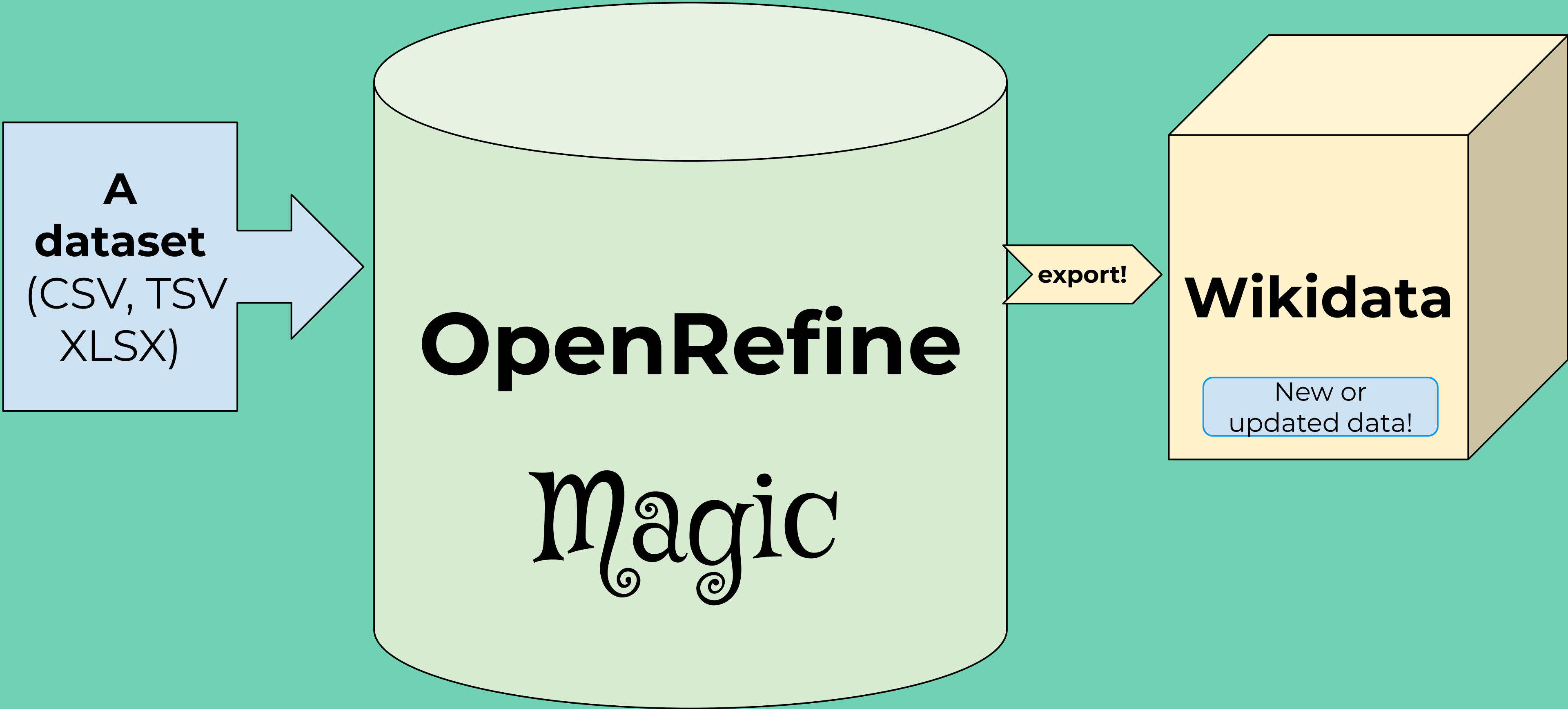
OpenRefine

- OpenRefine is a powerful tool for working with **tabular data**
- It can be used to **explore** and **transform** data
- It can **match** ("reconcile") data with data from **Wikidata**
- It can **update Wikidata** with **new** or existing items
- It can **upload files to Wikimedia Commons**, and updated their attributes

02 Our overall plan

"*First* we take Manhattan; *then* we take Berlin!"

Overall plan



A dataset (CSV, TSV XLSX)

OpenRefine

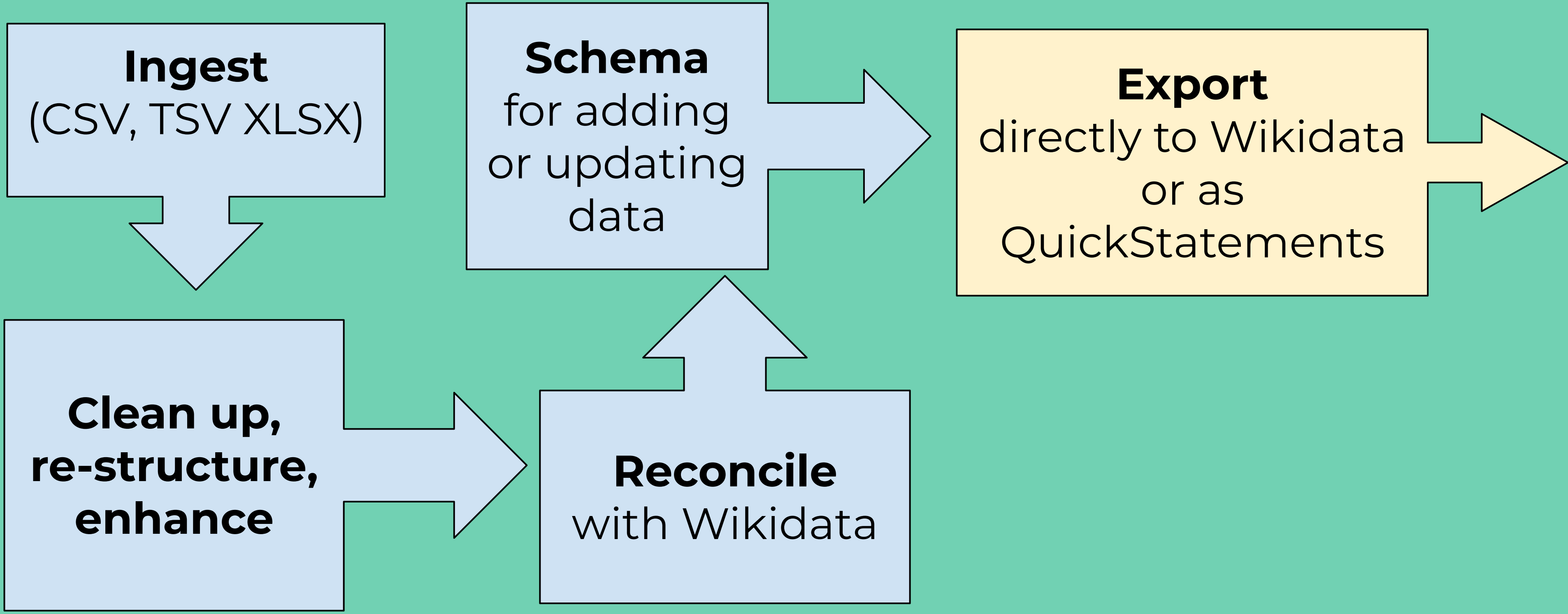
Magic

export!

Wikidata

New or updated data!

Plan zoom-in



Ingest
(CSV, TSV XLSX)

Clean up, re-structure, enhance

Reconcile
with Wikidata

Schema
for adding or updating data

Export
directly to Wikidata or as QuickStatements

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03 Ingesting data

Ingesting is just a fancy word for "getting something into something"
Can ingest from CSV, TSV, XLSX, URL, clipboard…

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04 Exploring and cleaning up data

Get data into the best shape you can *before* feeding it into Wikidata!

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04a Rows, records, columns...

And columns from columns!

04b Facets, filters, and thanks for all the fish!

Your data may surprise you!
Filter by value/range, sort; save permalinks;

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04c Editing and transforming

Common transforms, directly editing, splitting

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04d Undo / Redo

Be confident you can always go back!

04e Getting fancy with GREL

One of the most powerful tools you can learn is **regular expressions**!

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05 Reconciling with Wikidata

Reconciling?

- Reconciling is just a fancy word for **matching,** or **aligning**
- A reconciled column is one where the values in the cells have been **matched** (or not...) to an external source (Ex: **Wikidata items** (Qnnn))
- You can **help** OpenRefine when it gets it wrong.
- Reconciling is necessary for identifying **which** Wikidata item to update, and for feeding a correct value into Wikidata **when the value is itself a Wikidata item** (and not a string or number)

Reconciling tips

- It is worth **investigating** why reconciliation is harder than you expected. Often it is a case of a missing label or alias.
- You can **specify the instance-of** for the column you are reconciling
- You can **use values from other columns** to dramatically help the reconciliation.

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06 Scheming to update Wikidata

Creating the update schema without tears.

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The Schema

- A **Wikibase schema** is a **template** for OpenRefine, telling it which **items** to update, and what **statements** to change or add there, with what **references**.
- It is **very important** to get our schema right *before* updating a large set of data. Best to experiment with one or two items first.
- OpenRefine won't create **exact duplicates**, so it is safe to re-run an upload, and only what hasn't been uploaded yet should get updated.

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07 Exporting to Wikidata or QuickStatements

If you love your data, set it free!

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08 Resources

Resources

- The **Fine Manual** is actually really clear and concise!
- OpenRefine information page on Wikidata
  - A video tutorial by the main developer of OpenRefine (linked from information page above)
- OpenRefine information page on Commons
  - For batch-uploading files to Commons, or batch-updating file metadata. (not demonstrated today)

Which brings me to the final, ultimate secret...

09 The ~={secret}=~ to getting help

The ~={secret}=~

- The ~={secret}=~ to getting the help you need is...
  - ...**asking** for help
  - ...but **doing it right!**
- Asking for help the right way:
  - In the right place (+ don't ask to ask; just ask!)
  - With enough **context**, **links**, specifics
  - Responding to follow-ups and suggestions

Please please please don't be shy!

Remember:

With great power comes great responsibility;
use your power for good and not for evil.

Keep in touch!

Asaf Bartov
asaf@wikimedia.org