

## OpenRefine Parsing JSON follow-up

As a reminder, during our lesson we worked with JSON that we pulled from the CrossRef API (<http://api.crossref.org/journals/>). We used the Journal ISSNs in our data (in the “ISSNs” column) as unique identifiers for our queries to CrossRef (e.g. <http://api.crossref.org/journals/1099-4300>).

In response to our queries, CrossRef provided us with journal information in the JSON format (`"property": "value"`). Here’s a formatted and abbreviated snippet of the JSON we worked with in one of our cells:

```
{
  "status": "ok",
  "message-type": "journal",
  "message-version": "1.0.0",
  "message": {
    "title": "Entropy",
    "subjects": [
      {
        "name": "General Physics and Astronomy",
        "ASJC": 3100
      }
    ],
    "issn-type": [
      {
        "value": "1099-4300",
        "type": "electronic"
      }
    ]
  }
}
```

When we wanted to parse our JSON in order to pull out the journal title, we used the **Edit column > Add column based on this column** menu option, and then the following GREL expression:

```
value.parseJson().message.title
```

This worked to give us the values of the JSON property `"message"` and then the value of the child property `"title"`. In this example, `"Entropy"`.

Here, I’d like to mention how we can handle JSON properties with dashes (“-”) in them, e.g. “message-type”. In the example we had during our lesson, I tried to get the value of “message-type” and was unsuccessful with the following GREL expressions:

```
value.parseJson().message-type
```

and

```
value.parseJson(). "message-type"
```

Unfortunately, parsing JSON properties containing dashes requires slightly different syntax. Side note: If you do write JSON, please use underscores for your properties, e.g. “message\_type”. However, if you encounter dashes in JSON properties, the workaround is to use the following syntax for your OpenRefine GREL, brackets and quotes:

```
value.parseJson()["message-type"]
```

**Add column based on column Journal-Details**

New column name

On error ☒ set to blank ☐ store error ☐ copy value from original column

Expression Language

`value.parseJson()["message-type"]`

**Preview** History Starred Help

row	value	value.parseJson()["message-typ ...
1.	<pre>{ "status": "ok", "message-type": "journal", "message-version": "1.0.0", "message": { "last-status-check-time": 1620724106539, "counts": { "total-dois": 7129, "current-dois": 3246, "backfile-dois": 3883 }, "breakdowns": { "dois-by-issued-year": [[2020, 1443], [2019, 1274], [2018, 998], [2017, 694], [2021, 529], [2016, 459], [2015, 453], [2014, 328], [2013, 284], [2012, 137], [2010, 119], [2011, 101], [2009, 69], [2008, 55], [2003, 39], [2004, 33], [2001, 21], [2005, 20], [2006, 18], [2007, 17], [1999, 16], [2000, 12], [2002, 10]] }, "publisher": "MDPI AG", "coverage": { "affiliations-current": 0.0, "similarity-checking-current": 1.0, "funders-backfile": 0.1887715756893158, "licenses-</pre>	journal

OK Cancel

Figure 1: OpenRefine Screenshot