

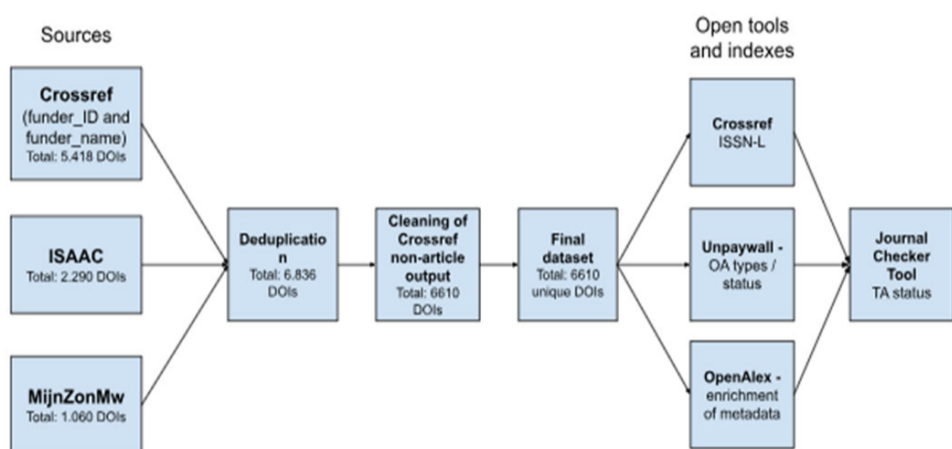
Tracking transformative agreements through open metadata

Method and validation using Dutch Research Council (NWO) / ZonMw funded papers

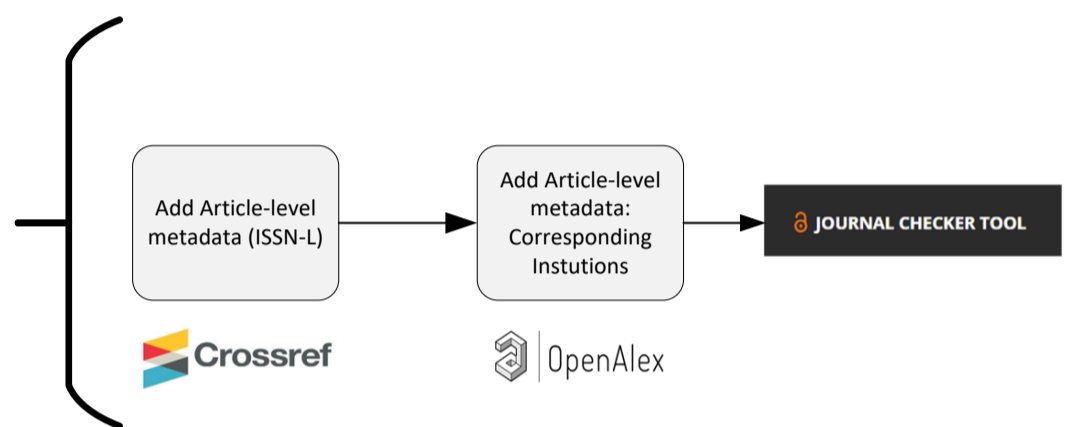
Abstract: this poster presents a method for calculating which articles have been covered by transformative agreements by using exclusively open metadata sources. The sources used are the Journal Checker Tool as developed by cOAlition S in combination with corresponding institution data from OpenAlex. The openness of this data allows everyone interested to determine from a given corpus of publications whether or not they were likely covered by a transformative agreement, without having access to the actual publisher's data. To demonstrate the potential use of the method, we have applied it to a dataset of publications funded by the Dutch Research Council (NWO) and its sister council for health research ZonMw.

Additionally, we have validated this method using the actual publisher data provided to the Dutch Library Consortium UKB, showing that this open method accurately identified 89% of the publications covered by transformative agreements, while the 11% false positives shed an interesting light on the limitations of this method. In the absence of hard, openly available article-level data on transformative agreements, we provide researchers and institutions with a powerful tool to critically track and evaluate the impact of these agreements.

Creation of dataset using open metadata

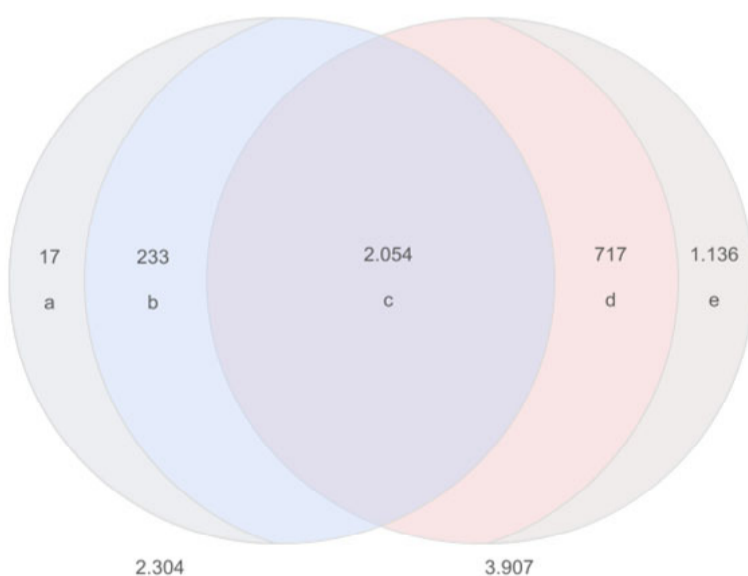


Pipeline used to enrich a given a DOI record



Methodology of deduplication of (open) metadata sources and open indexes used for analyses

Open method UKBsis dataset



Venn diagram showing the overlap between publications found to be covered by a transformative agreement using our open method (left) and actual figures as provided by publishers obtained from the UKBsis datahub (right).

1. A total number of **6.610 articles** were identified as being published in 2023 as the result of NWO/ZonMw funding. Using the information from the Journal Checker Tool **2.304** of these publications (or 34%) could potentially have been **covered by one of the existing transformative agreements**.

2. Comparing the data obtained through this open method with the actual figures from the **UKBsis datahub** leads to following conclusions:

- **2.054 out of 2.304** articles (or 89%) have been rightly ascribed to a **transformative agreement** using our open method
- **250** articles were assigned to a **transformative agreement** in our open method but were actually **not covered by a TA according to data from UKBsis data hub**.

Most important reasons:

- a TA was in place, but apparently authors chose not to make use of it.
- a TA was in place but the agreement was capped, meaning authors could not make use of it at the time of publication
- a TA was in place on the moment the analysis was performed (2025) but not on the moment of publication (2023).
- article type (e.g. letters to the editor) is not supported under the TA.
- a TA was in place but was negotiated on institutional level, rather than on consortium level meaning it was not included in the UKBsis datahub.

3. UKBsis identified **3.907 articles** published in 2023, in which funding from either **NWO and/or ZonMw was acknowledged** and that were published as part of a TA. Therefore, **1.853 publications were 'missed' using our open method**.

Two main reasons :

- **717 articles were actually part of TA but not picked up by our open method** because the corresponding author was not recognized by OpenAlex as being affiliated with one of the Dutch institutions.
- **1.136 articles were actually published as part of a TA but were not part of our dataset** because they were not identified as funded by NWO or ZonMw. UKBsis data hub has richer funding metadata, not only from Crossref but also from Scopus and OpenAIRE.

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