

Citations After Retraction: A Persistent Problem

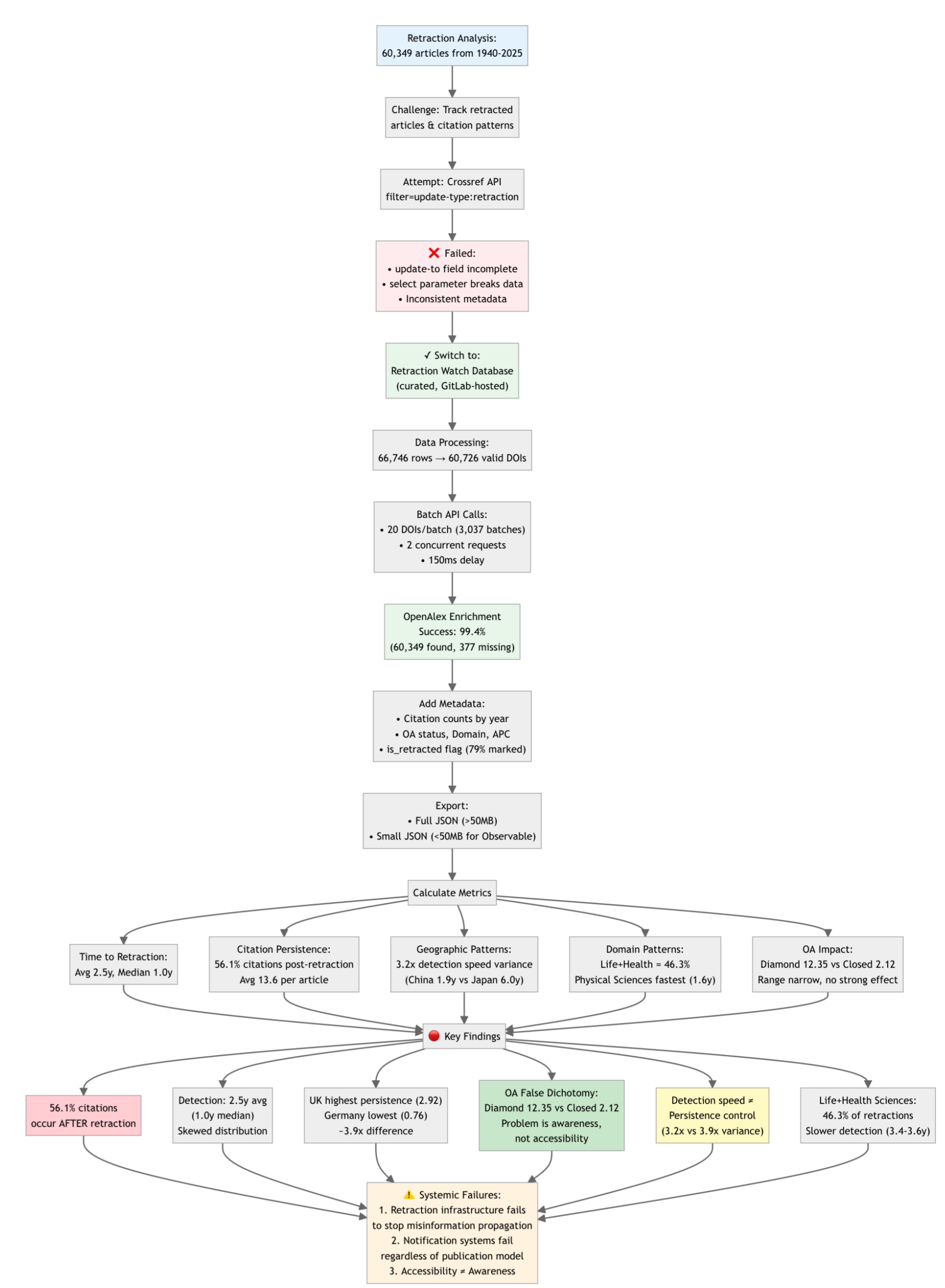
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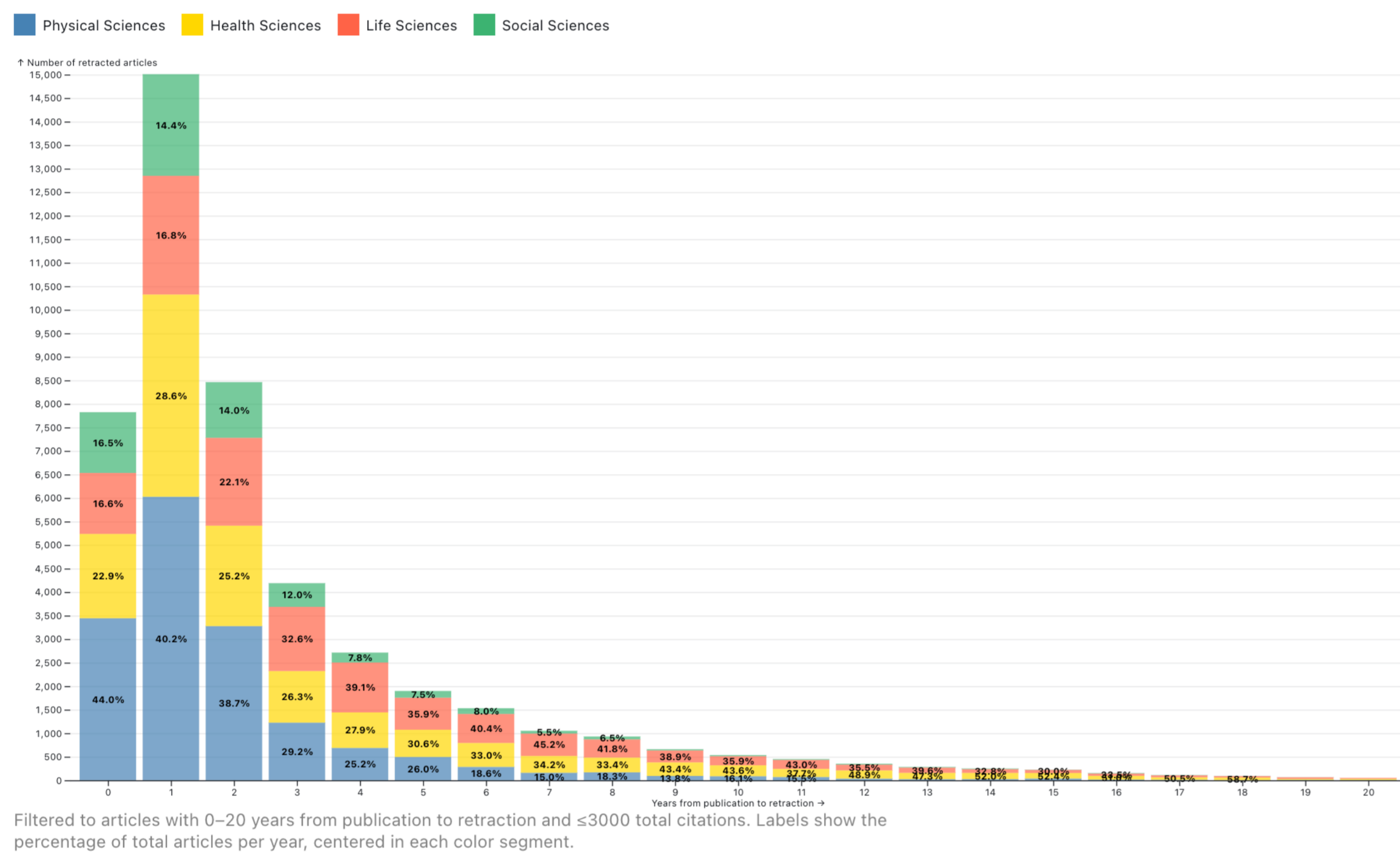
Problem
Retraction does not halt the influence of scientific papers: retracted articles continue to be cited years after removal from the literature. Existing infrastructures (Crossref, Retraction Watch, PostPub) track why papers are retracted, but not how long they continue to influence citation networks. This temporal gap prevents us from understanding how flawed knowledge persists.

Key questions
What is the overall scale of retractions and citations?
What share of citations occur after retraction?
How long does detection and retraction take on average?
Do patterns vary across disciplines, countries, or publishers?
Does open access status shape citation persistence?

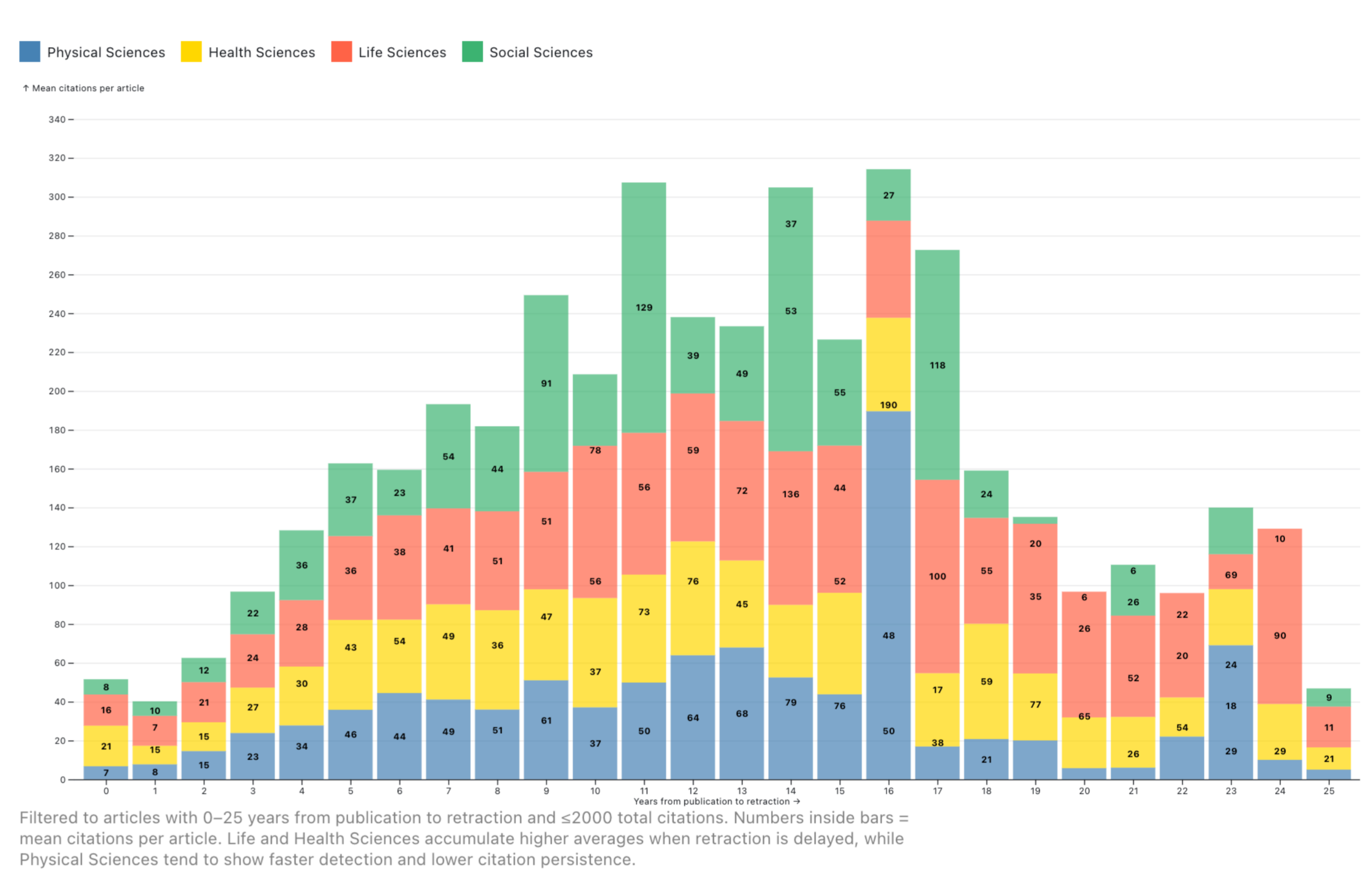
Outcome
We established the dataset and methodology to analyze the temporal dimension of retractions. Preliminary findings show that 56% of citations occur post-retraction, the global average detection time is 2.5 years (median 1 year), and there are sharp cross-country and disciplinary differences. Retraction alone does not prevent the continued spread of flawed knowledge.



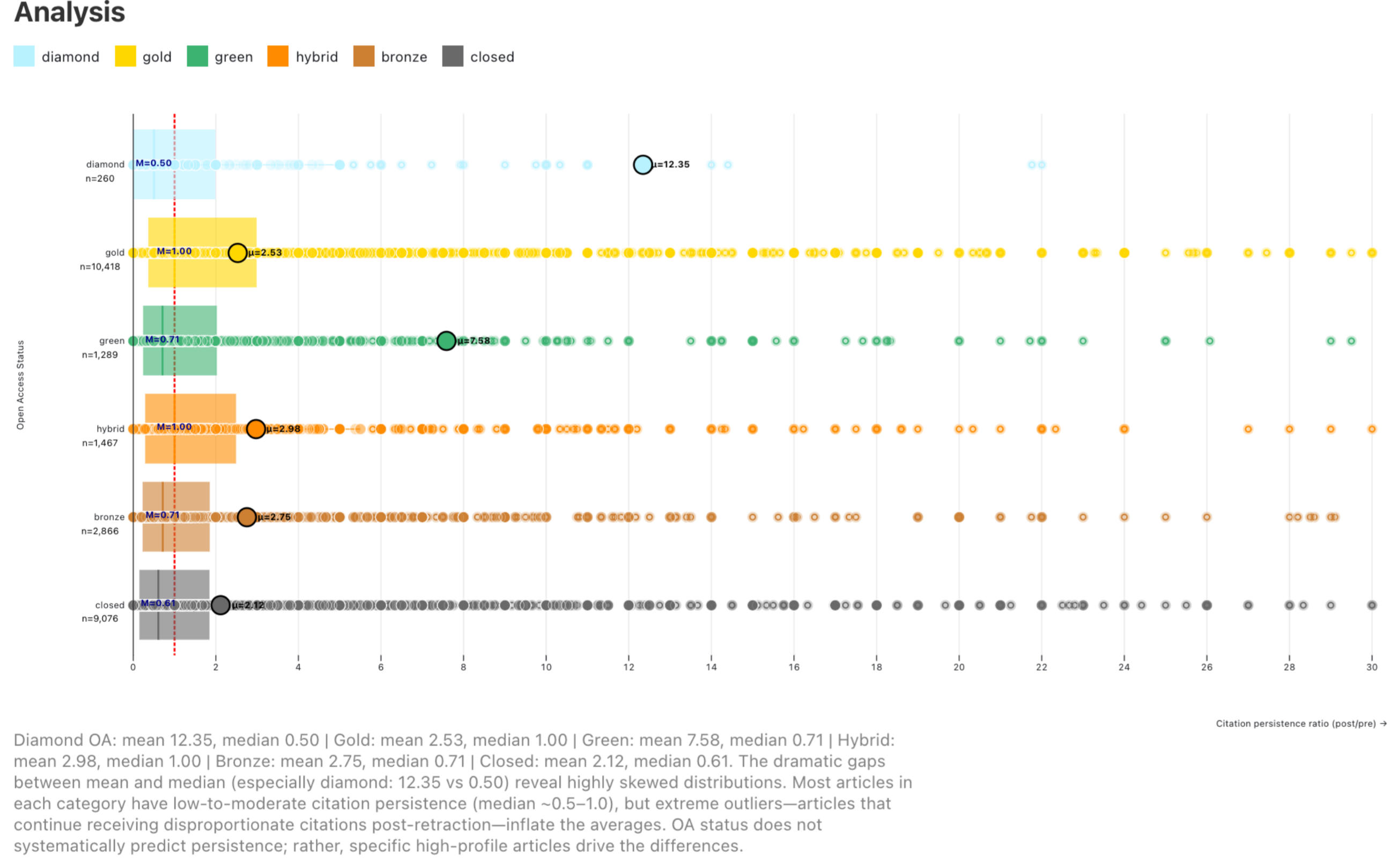
Retracted Articles by Domain and Retraction Lag



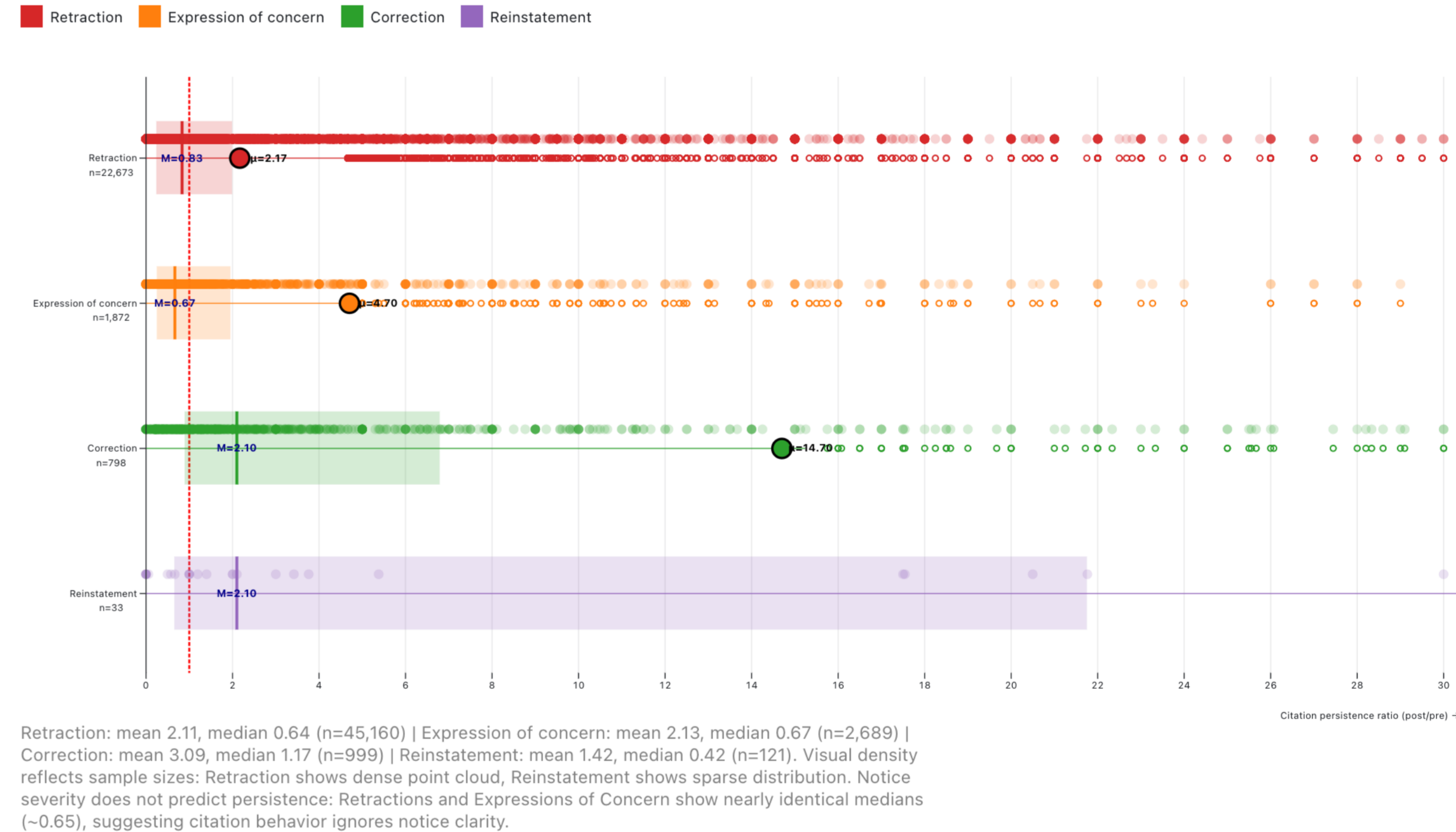
Mean Citations per Retracted Article by Domain and Retraction Lag



Citation Persistence by Open Access Status: Mean vs Median Analysis



Citation Persistence by Retraction Notice Severity



Country-Level Retraction Response: Detection Speed vs Post-Retraction Citation Impact

