

Evaluating the Impact of Altmetrics

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The Problem

- Traditional citation metrics do not take into account the impact of research outside of citations and publications

The Solution?

- Altmetrics seek to describe the reach of scholarly activity across the internet and social media to paint a more vivid picture of the scholarly landscape

Goals and Objectives

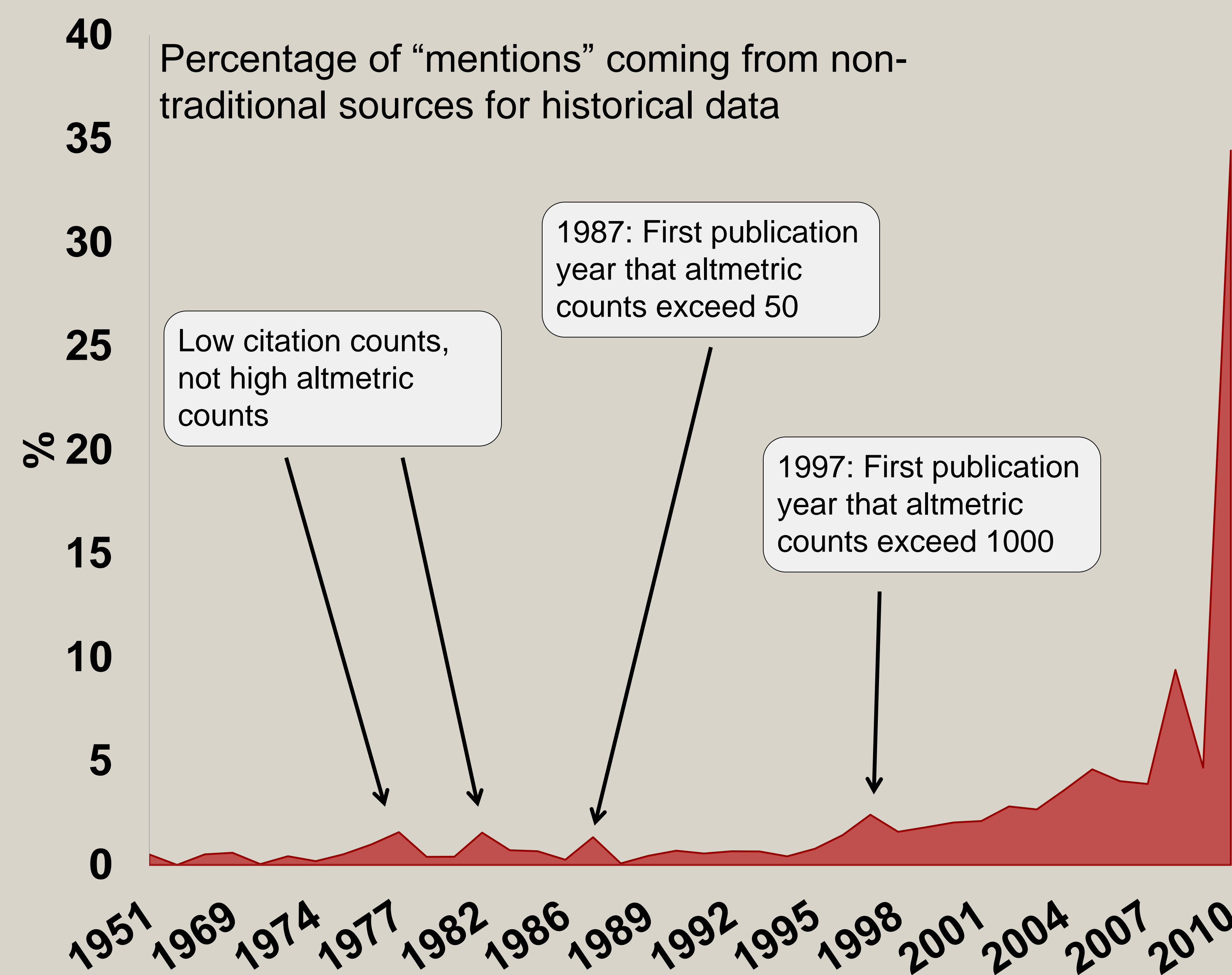
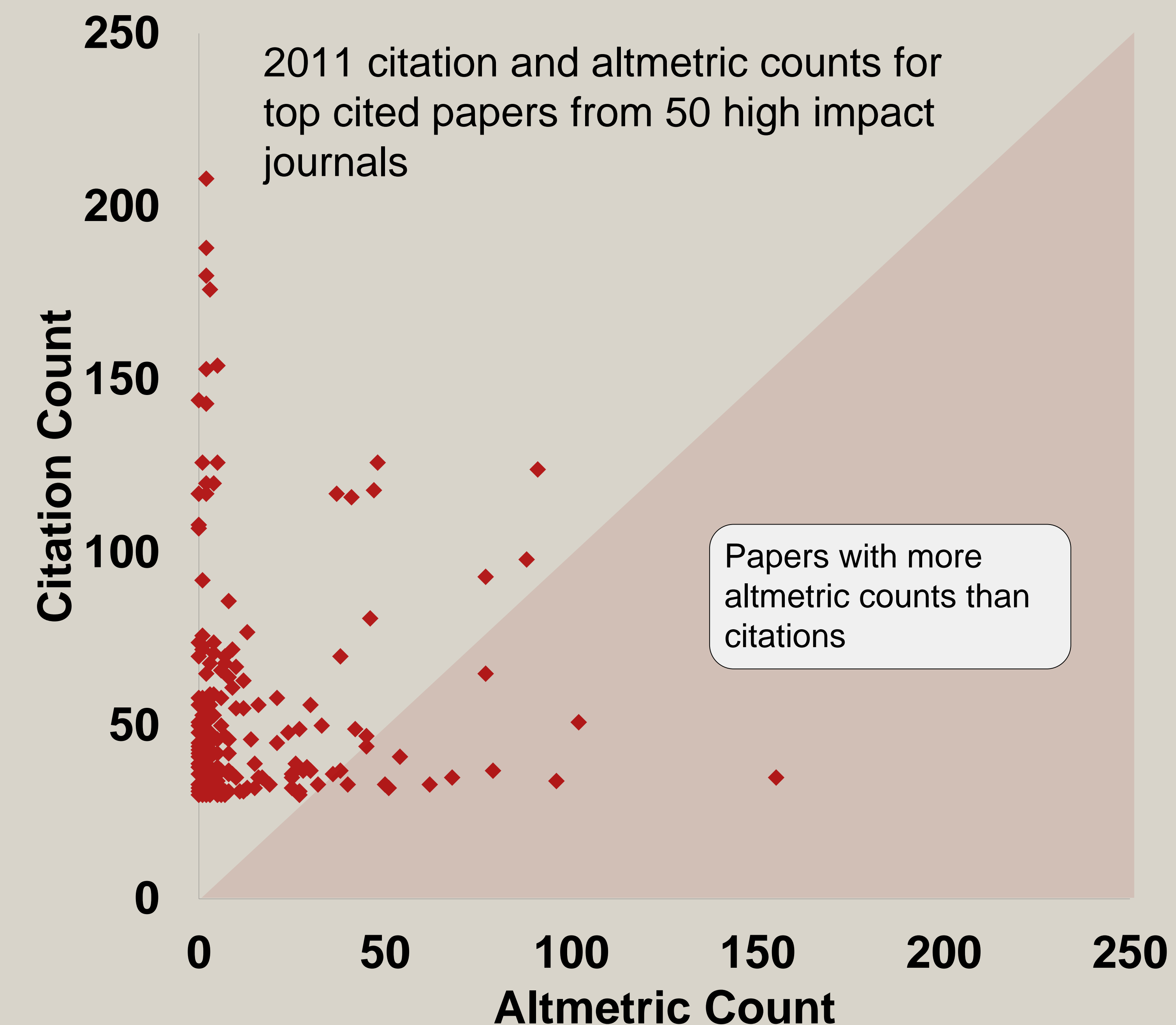
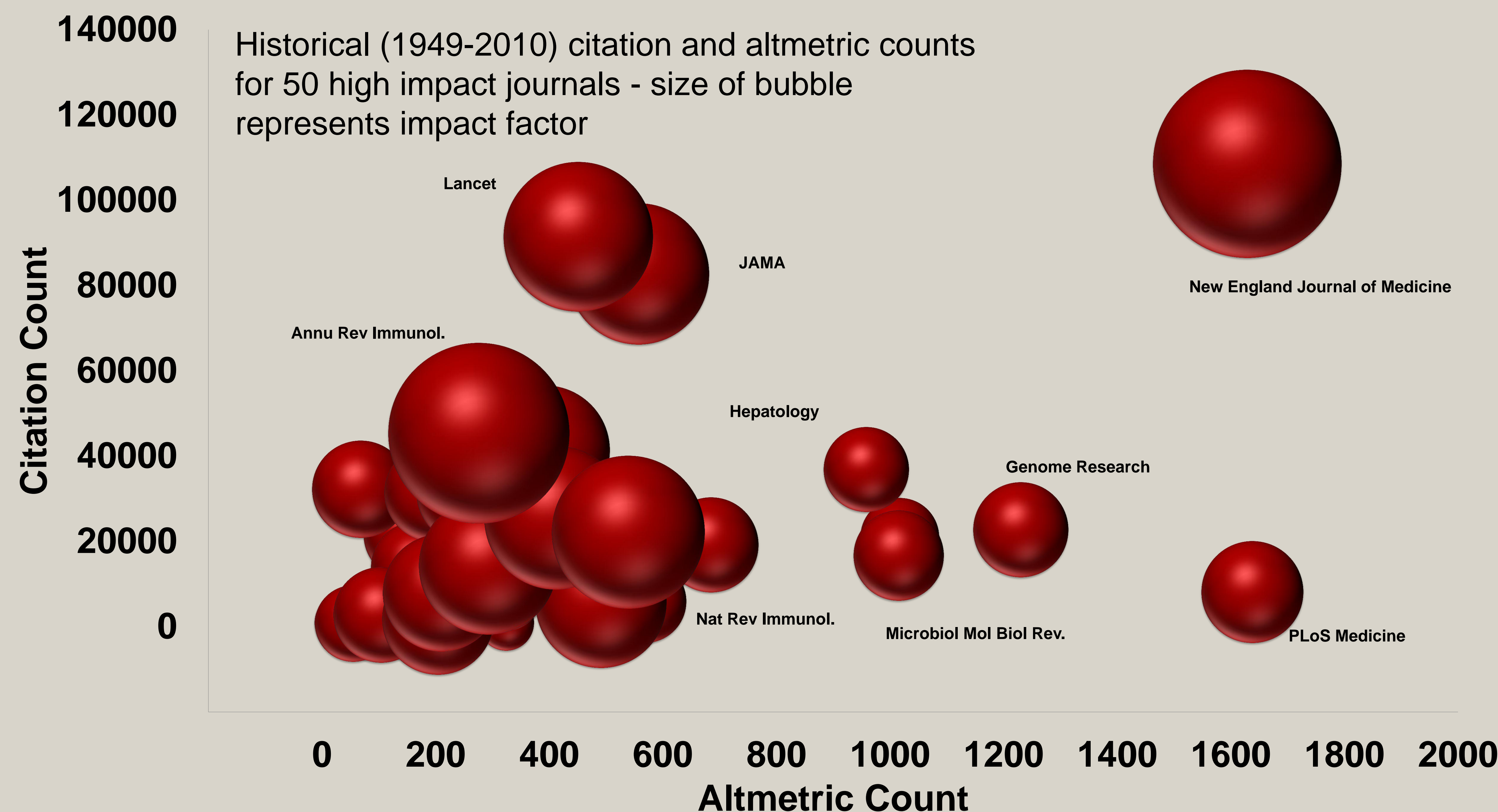
- Examine the relationship between traditional citation metrics and altmetrics for highly cited papers
- Determine if social media mentions play a more significant role in scholarly discourse for recently published papers
- Explore total-impact.org (developed by Heather Piwowar, Jason Priem, et al, follow link for more info!) as a tool for determining non-traditional scholarly impact via Twitter, Facebook, Mendeley, and other social media tools

Methods

- Historical Analysis (1949-2010)
 - Sampled journals with the top 50 impact factors in biomedical-related topics, as reported by Journal Citation Reports (JCR)
 - Downloaded citation data for 20 most cited papers in each journal, as reported by Scopus
 - Using total-impact.org, the altmetric counts for each paper were determined
- Recent Publication Analysis (2011)
 - Sampled same journal range
 - Downloaded citation data for 50 most cited papers overall
 - Using total-impact.org, the altmetric counts for each paper were determined

Limitations

- Altmetric sources exclude some parts of the web and require the mention of an identifier (DOI, PMID, URL, etc) – will miss casual author mentions or incomplete links/citations
- Altmetric counts are taken as a snapshot in time.



Discussion

- Historical Analysis (1949-2010)
 - Raw data reveals a slight trend towards papers with high citation counts also having high altmetric counts, but not statistically significant
 - NEJM papers see a lot of activity from news outlets and readers commenting on Facebook and Twitter
 - The PLoS platform is highly conducive to sharing work online
 - In general, open access publications did not differ from their traditional counterparts
- Recent Publication Analysis (2011)
 - Altmetrics allow for quick dissemination
 - Requires further investigation to see if trends seen in 2010 and 2011 continues as papers become cited

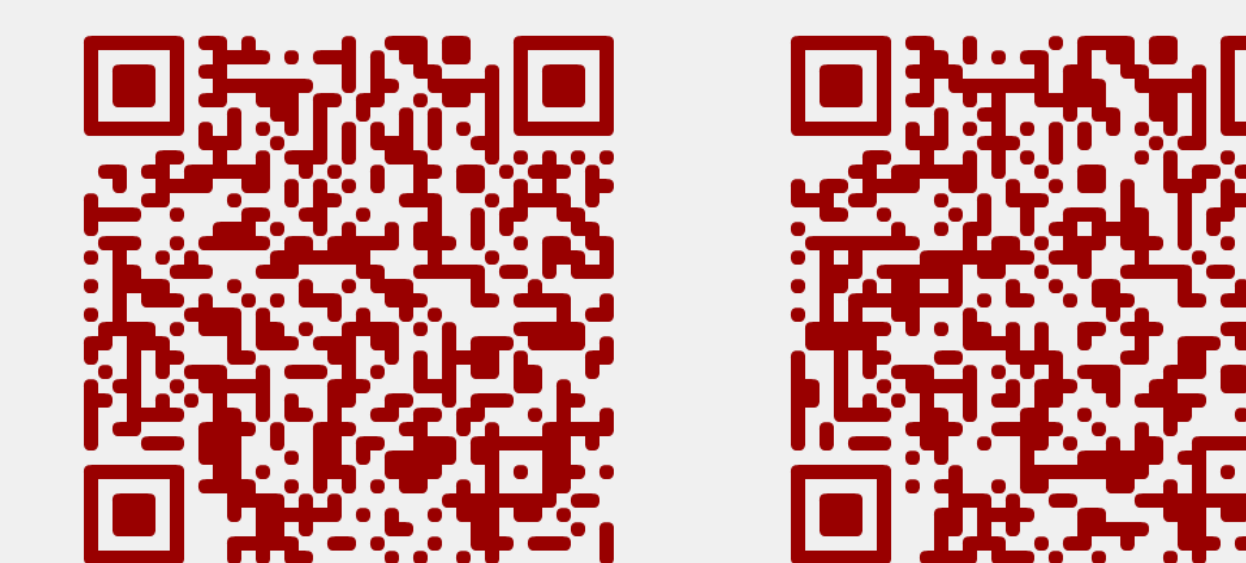
Future Work

- Rank journals based on altmetric counts
- Follow through on 2011 data to see if trend continues
- Determine non-traditional distribution methods that yield the highest traffic

Contact

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Downloads



Poster

Data

totalImpact

<http://total-impact.org/>

