Maintaining Scholarly Integrity in the Age of Bibliometrics

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Our Position on Citation Counts

- Noisy but valid measure of scholarly output and impact
- U.S. News currently uses a single survey question to assess faculty quality across schools:
 Quality Assessment (weighted by 0.40)
 - Peer assessment score (0.25): In fall 2018, law school deans, deans of academic affairs, chairs of faculty appointments and the most recently tenured faculty members were asked to rate programs on a scale from marginal (1) to outstanding (5). Those individuals who did not know enough about a school to evaluate it fairly were asked to mark "don't know."

A school's score is the average of all the respondents who rated it. Responses of "don't know" counted neither for nor against a school. Seventy-two percent of those surveyed responded.

• Assessment score by lawyers and judges (0.15): In fall 2018, as in previous years, legal professionals — including the hiring partners of law firms, practicing attorneys and judges — were asked to rate programs on a scale from 1 (marginal) to 5 (outstanding). Those individuals who did not know enough about a school to evaluate it fairly were asked to mark "don't know." The law schools provided U.S. News with the names of those surveyed.

A school's score is the average of all the respondents who rated it in the three most recent years of survey results. Responses of "don't know" counted neither for nor against a school.

- However, a greater emphasis on faculty citation counts raises two serious concerns:
 - Manipulation of Citation Counts
 - Unfair Representation of the Influence of Certain Types of Work

Citation Count Integrity Depends on Counting <u>Valid</u> Citations from a <u>Fair Sample</u> of Scholarship

• The manipulation problem: once the bibliometric methodology is known, those affected by the results of the bibliometric study can take steps to manipulate those results

• The representation problem: unless the database utilized in a citation study captures all relevant scholarship or is unbiased in the sources sampled, the results of the study will not be representative of true scholarly impact

Manipulation Problem

- Once the bibliometric methodology is known, those affected by the results of the bibliometric study can take steps to manipulate those results
 - Increased self citations
 - Institutional citation cartels
 - Inflation by subtraction: omitting unproductive faculty
 - Inflation by addition: adding highly-cited faculty from outside law school
- Increased output concerns
 - Some scholars may simply publish more works in less time, leading to worse scholarship
 - That strategy should be self-defeating if the work is lower quality and, as a result, cited less

Information-Forcing Solution for Citation Inflation

- Disclose in "star footnote" number of citations to author's prior work and work of institutional colleagues:
 - * Professor of Law, University of Virginia. Self citations: 10. Colleague citations: 100.

- Accountability to Fellow Scholars
- Accountability to Journal Editors
- Systematic comparison across schools

Transparency Solution to Faculty Manipulation

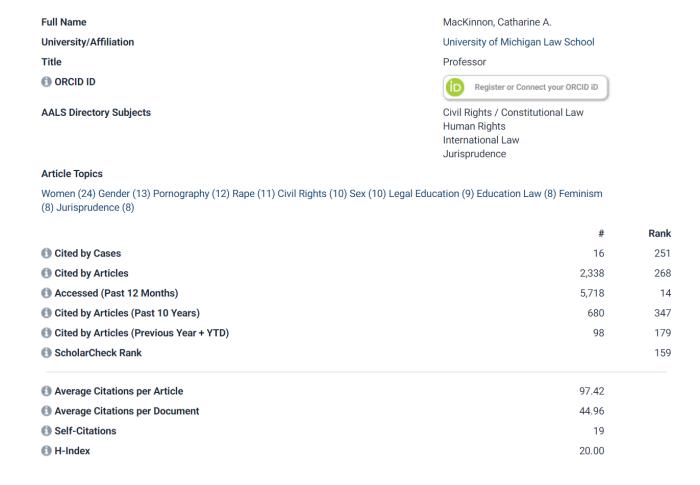
- Make faculty lists publicly available in advance of publication
- Make study data public after an embargo

Representation Problem

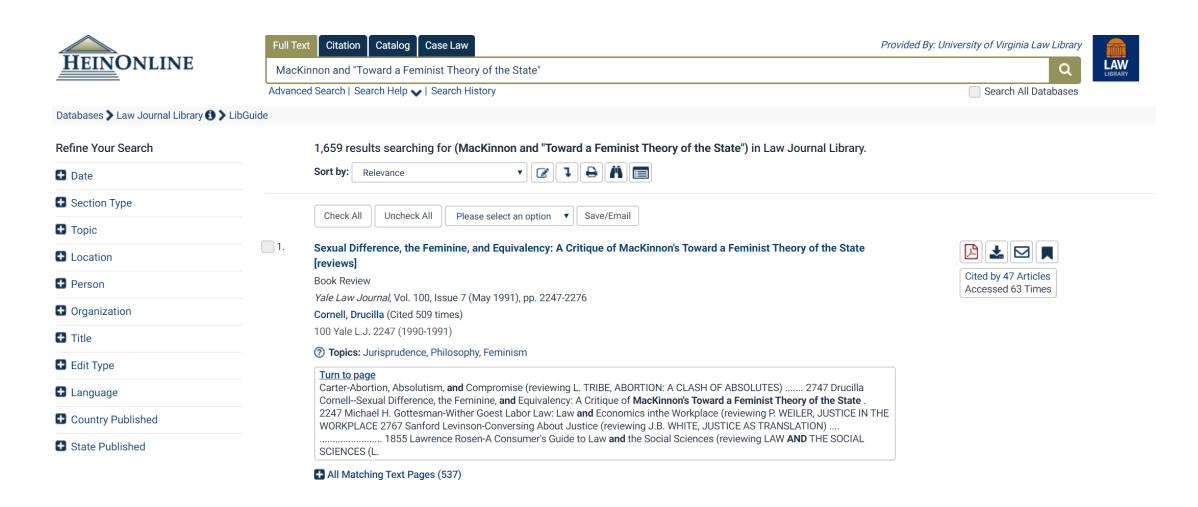
- Unless the database utilized in a citation study captures all relevant scholarship or is unbiased in the sources sampled, the results of the study will not be representative of true scholarly impact
 - Public law scholars tend to fare better in legal citation studies
 - Interdisciplinary scholarship tends to fare worse
 - Hein covers more interdisciplinary journals than Westlaw but omits book citations

Prof. Catharine A. MacKinnon's Author Profile on Hein as of 12/21/19: **2338 Citations**

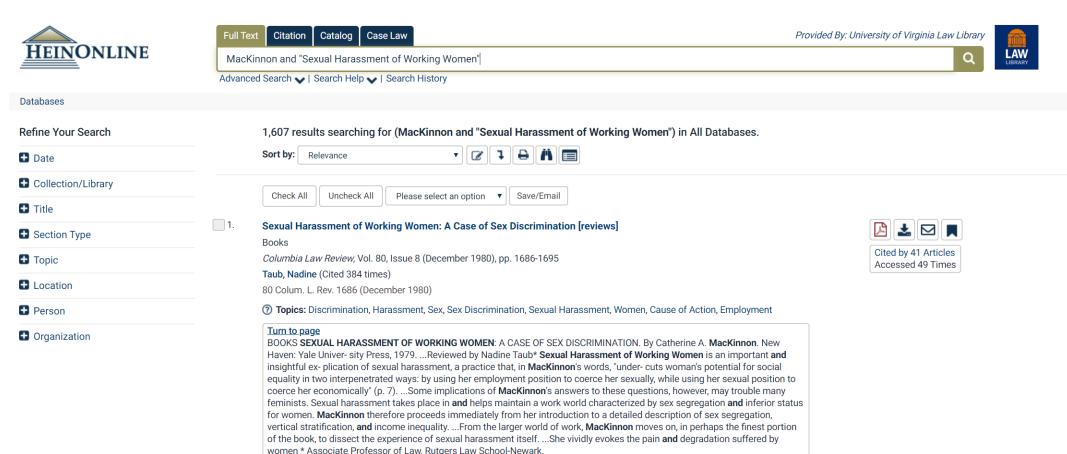
MacKinnon, Catharine A.



Citations to MacKinnon, *Toward a Feminist Theory of the State* (1993) in Hein as of 12/21/19: **1659 Citations**



Citations to MacKinnon, Sexual Harassment of Working Women (1979): **1607 Citations**



All Matching Text Pages (10)

Significant Undercounting

 The citation count for just two of Prof. MacKinnon's books is higher than the total citation count in Hein's Author Profile for Prof. MacKinnon

- Using the Sisk search for citations to work by Prof. MacKinnon in Westlaw's JLR database without any time limitation yields 4997 hits, which is much greater than Hein's Author Profile count of 2338 for Prof. MacKinnon
 - Search terms: TE(Catharine /2 MacKinnon)

Mitigating the Representation Problem

- Improve Hein's citation measurement approach to cover all types of work by a scholar
- Or combine counts from Hein's Author Profiles with Sisk et al. counts from Westlaw
 - Merits of combination: Hein has more interdisciplinary journals, but misses cites to many books and other works given its citation counting method; Westlaw covers fewer sources but the Sisk counting method is more inclusive
- Develop field-specific norms about high, medium, and low citation rates
 - Should also examine demographic trends for bias in citation patterns
- Institutions should designate faculty fields of expertise using an agreed classification system

One Possible Specialty Classification System

- Administrative Law
- Business and Consumer Law (including bankruptcy, contracts, commercial law, corporations, secured transactions, and securities)
- Civil Litigation (including civil procedure, civil rights litigation, conflicts of law dispute resolution, federal courts, and remedies)
- Constitutional Law (covering state and federal constitutional law and including religion and the law)
- Criminal Law and Criminal Procedure (including sentencing)
- Environmental Law (including land use planning and natural resources)
- Evidence
- Family Law
- Health Law and Bioethics
- History and the Humanities
- International and Comparative Law (including law of war and military law)
- Philosophy of Law (including critical race theory, feminist theory, and moral theory)
- Labor and Employment Law
- Law and the Sciences (including anthropology, biological sciences, economics, evolutionary approaches, linguistics, neuroscience, physical sciences, psychology, and sociology)
- Legal Pedagogy
- Legal Ethics and Professional Responsibility
- Legislation and Interpretation (including state and local government)
- Property (including intellectual property)
- Tax (including ERISA and pension law)
- Torts and Insurance Law
- Trusts and Estates

For more information, please see:

- Andrew T. Hayashi & Gregory Mitchell, *Maintaining Scholarly Integrity in the Age of Bibliometrics*, JOURNAL OF LEGAL EDUCATION (Forthcoming)
- Available on SSRN: https://ssrn.com/abstract=3419054