

When are Philosophy Articles Cited?

Anon

2025-06-16

It's natural to believe that philosophy citations are typically to long ago pieces. We're still talking about philosophers from millenia ago. More strikingly, we're still talking about papers from half a century ago not as historical papers, but as part of the contemporary debate. But a systematic look at the citation data shows that these cases are outliers. Most citations are to recently published works. Surprisingly, this is less true in recent years than it used to be. The effect of electronic publishing and communication has been to make citations, on average, older. After we adjust for the typical age of philosophy citations, and this changing trend, it turns out that the 2000s were a particularly influential time in philosophy publishing. Articles published in that decade are cited more than earlier or later articles, once we adjust for the typical times articles are cited, and the changing patterns of citation. This is arguably related to broad changes in the interests of philosophers, towards social philosophy, and epistemology.

1 Introduction

This paper is about the patterns of citations of philosophy journal articles in philosophy journals. Obviously philosophy journals cite more things than philosophy journals, and just as obviously philosophy journal articles get cited in other places. But looking just at journal-to-journal citations allows us to get a citation set that is relatively complete, and hence make some systematic generalisations about the way articles are cited over time. It turns out some of these generalisations are surprising.

Before looking at the data, here are two things I believed about philosophy citations. First, philosophers tend to cite very old papers. We still regularly teach a number of papers over half a century old in introductory classes; e.g., H. G. Frankfurt (1969), Thomson (1971), Singer (1972), and Lewis (1973a). These aren't taught as history papers, but as early entries into the contemporary philosophical debate.

While most papers aren't cited as much as these papers are, I thought the pattern that old papers keep being cited extended to their less famous counterparts. Second, the technological changes of the last quarter century meant that this practice was being slowly reversed. A series of technological innovations made it easier to cite newer and newer works. These innovations included the spread of email, the rise of preprint archives (e.g., arXiv, SSRN, PhilPapers), and eventually official preprints in things like EarlyView. So, I thought, citations should be getting younger, because the delay between publishing and getting widely known was removed.

Both of these thoughts were wrong.

On the first point, the generalisation I made from those famous papers was just wrong. Normal papers differ from famous papers not just in how often they are cited, but in the shape of their citations. The main evidence I'll use for this is something I'll call the *citation ratio*. The citation ratio of year o in year n is the mean number of citations, in year n , of articles published in year o , divided by the mean number of citations, in year n , of articles published in years $n-10$ to $n-3$. (I'll say much more about why I'm using this measure in what follows.) Figure 1 shows the average citation ratio for different *ages*, of citations, i.e., the number of years between o and n .¹

Each dot on that graph is a citation ratio for a particular pair of years; the line shows the average citation ratio for all pairs with the same age. The shape is unmistakable; articles get cited much much more when they are relatively young than when they are older.

The 'evidence' I gave for the opposite view in the introductory paragraph wasn't entirely wrong. If we redo Figure 1 just looking at articles which have 15 or more citations in philosophy journals. (This turns out to be a fairly small percentage of the sample.)

The numbers on the y-axis in Figure 2 are higher than in Figure 1. That's not surprising; it just means highly cited articles get cited more frequently. What is striking is the different shape of the graphs. Typical philosophy articles, if they get cited at all, get cited soon after publication and they fade into obscurity.

¹The graph also includes some 'jitter' to make the different points more easily visible. I've put each decade of original publication in a different colour; I'll break those out in Figure 3. The graph starts in 1975 because the data is much noisier before then, for reasons we'll get to below.

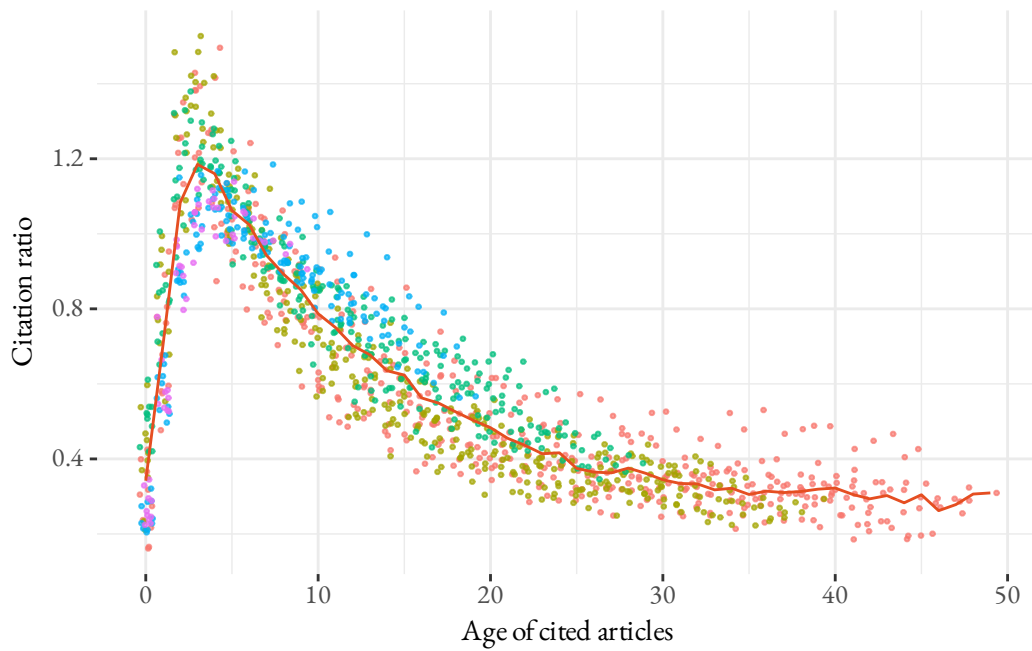


Figure 1: Age effects from 1975 onwards on a single graph, with the overall average shown.

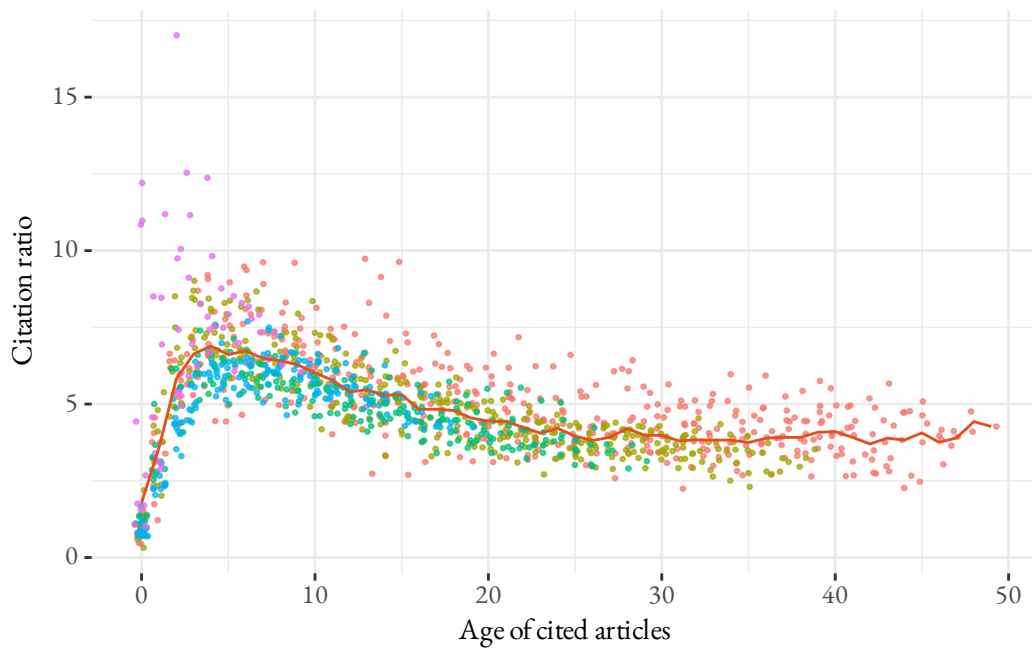


Figure 2: A version of Figure 1 just looking at highly cited articles

Highly cited articles keep getting cited decades after their publication.

These results aren't a priori obvious; things could have turned out otherwise. It could have been that there were a trove of articles which were ignored after publication and then accrued five to ten citations a couple of decades later. There are some articles that were very frequently cited soon after publication but which are now largely ignored. (This happens most frequently in philosophy of science and in philosophy of mind, I think for different reasons in the two cases.) But these cases are outliers. Most of the articles that were influential soon after publication stay that way.

For the second point, we can simply break up Figure 1 by ten year chunks. In Figure 3 I've taken the points by from Figure 1, and grouped them into 'decades'. Because I'm working here with 1975-2024 data, the decades are 1975-1984, 1985-1994 etc. To make it easier to compare decades, I've removed the last one, where there isn't enough data, and removed all points with an age over 20.

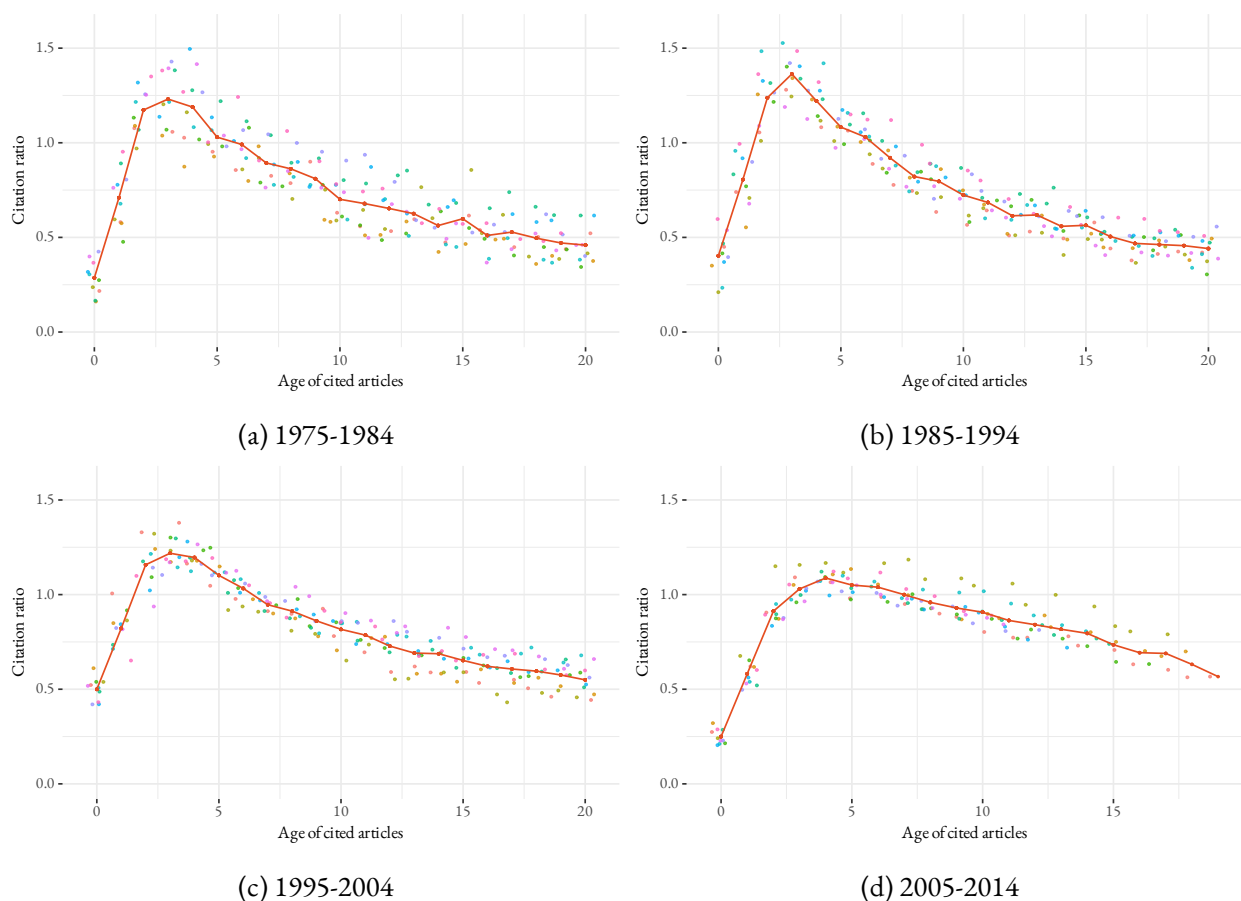


Figure 3: Citation ratio for different decades

There are three general trends across these graphs, especially after the second graph.

1. The peaks are getting later. In the first two graphs, the line is clearly heading down by age 5; in the last one it is barely off the peak.
2. The peaks are getting lower. In the last graph we barely see it cross 1.
3. The declines are much, much flatter. If you look around age 15 in the four graphs, you see the values rise steadily over time.

What all this means is that citations are getting older. While it's still true that articles from a year are (collectively) cited a more often from ages 2-5 than from ages 12-15, the difference between those two rates has fallen remarkably. The effect of technology on citations has been the complete opposite of what I expected.

The rest of this paper has two aims.

First, I'm going to set out the methodology behind these graphs, go over the choices I made in building them, and argue that these were at least defensible choices. The intended conclusion is that these graphs really show what I say they do, that traditionally citations were mostly to very recent articles, but they are now more frequently to older articles.

Second, I'm going to look citations from various years, after adjusting for these typical citation rates, and see which years have been more influential in the later literature. I suspect readers will not be surprised that the early 1970s stand out as being particularly influential. What might be more surprising is that the next most influential period, in terms of how often articles from then are cited compared to the overall trends, is the 2000s. There are a few possible reasons for this, but I suspect the main one is the rising importance at that time of epistemology. (This is something Eugenio Petrovich (2024) also found using a somewhat different data set.) More generally, looking at citations from different periods, and especially looking at which articles make up those citations, is a useful guide to the history of those periods. Most work on the history of analytic philosophy doesn't get beyond the early 1970s; this is an early attempt to quantify what happens in the years after the changes brought about by Kripke, Lewis, Rawls and others

in those years.

2 Age of Citations

2.1 Methodology

The data for this study comes from Web of Science (hereafter, WoS). In this section I'll go over which data I chose to use, and how I patched it together.

The bulk of the data comes from the XML files that WoS makes available to subscribing institutions. Until recently, that included my own, so that's where most of the data through 2021 comes from. That subscription has not been renewed, so the data since 2021 comes from the WoS API.²

The XML file is rather large. After de-compression it's over a terabyte. To make it manageable, I filtered down to *articles* (as opposed to discussion notes, book reviews, editorial matters, and so on), and whose category was either Philosophy or History & Philosophy of Science. I then selected by hand the hundred journals with the most inbound citations (among articles in these categories) which were (a) primarily English language, (b) not primarily history of science and (c) broadly 'analytic' rather than 'continental'. These were somewhat subjective choices, but the result was a reasonable collection of the journals which are most important for telling the story of a certain kind of philosophy over the last several decades.

The list of journals being used, as well as some basic statistical information about them, is in ?@sec-
appendix.

In that appendix I've also included some more details about precise what was and wasn't included. The most important thing to know is that the study only considers years of a journal that are indexed by WoS. This typically starts several years after the journal is founded. For example, it only starts indexing *Mind & Language* in 1994, although the journal is founded eight years earlier.

²This is also via a subscription through my institution; the XML is more expensive.

Table 1: The journals included in this study.

Journal	Articles	First Year	Most Recent Year
American Philosophical Quarterly	1835	1964	2024
Analysis	2719	1975	2024
Analytic Philosophy	190	2016	2024
Archiv für Geschichte der Philosophie	672	1975	2024
Australasian Journal of Philosophy	1736	1975	2024
Biology and Philosophy	1225	1988	2024
British Journal for the History of Philosophy	834	2007	2024
British Journal for the Philosophy of Science	1620	1956	2024
British Journal of Aesthetics	1436	1975	2024
Bulletin of Symbolic Logic	443	1997	2024
Canadian Journal of Philosophy	1552	1975	2023
Croatian Journal of Philosophy	376	2007	2024
Dialogue	1555	1975	2024
Economics and Philosophy	568	1986	2024
Episteme	586	2005	2024
Ergo	386	2016	2024
Erkenntnis	1780	2000	2024
Ethical Theory and Moral Practice	902	2008	2024
Ethics	1673	1955	2024
Ethics and Information Technology	567	2001	2024
European Journal for Philosophy of Science	562	2011	2024
European Journal of Philosophy	994	1998	2024
Heythrop Journal	1559	1975	2024

Table 1: The journals included in this study.

Journal	Articles	First Year	Most Recent Year
History and Philosophy of Logic	522	1992	2024
Hypatia	683	2009	2024
Inquiry	1646	1966	2024
International Journal for Philosophy of Religion	1149	1975	2024
International Philosophical Quarterly	1588	1961	2023
Journal of Aesthetics and Art Criticism	1539	1975	2024
Journal of Applied Philosophy	666	2006	2024
Journal of Chinese Philosophy	1278	1973	2024
Journal of Consciousness Studies	1525	2000	2024
Journal of Indian Philosophy	1107	1975	2024
Journal of Medical Ethics	4340	1975	2024
Journal of Moral Philosophy	392	2005	2024
Journal of Philosophical Logic	1497	1972	2024
Journal of Philosophical Research	463	2005	2024
Journal of Philosophy	2761	1956	2024
Journal of Political Philosophy	609	1998	2023
Journal of Social Philosophy	508	2008	2024
Journal of Symbolic Logic	4363	1966	2024
Journal of Value Inquiry	1369	1980	2024
Journal of the American Philosophical Association	340	2015	2024
Journal of the History of Ideas	2212	1956	2024
Journal of the History of Philosophy	1138	1975	2024
Journal of the Philosophy of History	284	2010	2024

Table 1: The journals included in this study.

Journal	Articles	First Year	Most Recent Year
Kant-Studien	1134	1975	2024
Kantian Review	337	2010	2024
Kennedy Institute of Ethics Journal	574	1995	2024
Law and Philosophy	852	1982	2024
Linguistics and Philosophy	878	1979	2024
Logique et Analyse	340	2007	2021
Metaphilosophy	1562	1975	2024
Mind	1980	1956	2024
Mind & Language	893	1994	2024
Minds and Machines	756	1992	2024
Monist	1975	1963	2024
Notre Dame Journal of Formal Logic	486	2009	2024
Noûs	1480	1975	2024
Pacific Philosophical Quarterly	1231	1980	2024
Philosophers' Imprint	402	2010	2024
Philosophia	2249	1975	2024
Philosophia Mathematica	243	2008	2024
Philosophical Explorations	390	2008	2024
Philosophical Forum	851	1971	2024
Philosophical Investigations	708	1983	2024
Philosophical Papers	234	2009	2023
Philosophical Perspectives	305	2007	2023
Philosophical Psychology	1312	1991	2024

Table 1: The journals included in this study.

Journal	Articles	First Year	Most Recent Year
Philosophical Quarterly	1450	1975	2024
Philosophical Review	1033	1956	2024
Philosophical Studies	5485	1956	2024
Philosophy	1811	1956	2024
Philosophy & Public Affairs	733	1971	2024
Philosophy Compass	651	2015	2024
Philosophy East and West	1604	1966	2024
Philosophy and Phenomenological Research	3273	1956	2024
Philosophy and Rhetoric	927	1975	2024
Philosophy of Science	3259	1956	2024
Philosophy of the Social Sciences	997	1975	2024
Phronesis	783	1975	2024
Politics, Philosophy and Economics	325	2008	2024
Ratio	1090	1974	2024
Res Philosophica	360	2013	2024
Review of Metaphysics	1616	1956	2024
Review of Symbolic Logic	578	2008	2024
Russell	345	1981	2024
Social Epistemology	489	2011	2024
Social Philosophy and Policy	973	1983	2024
South African Journal of Philosophy	793	1987	2024
Southern Journal of Philosophy	1984	1976	2024
Studia Logica	734	2010	2024

Table 1: The journals included in this study.

Journal	Articles	First Year	Most Recent Year
Studies in History and Philosophy of Science	1832	1974	2024
Synthese	7770	1966	2024
Theoria	459	2007	2024
Theory and Decision	1936	1970	2024
Thought	219	2016	2022
Topoi	1327	1982	2024
Transactions of the Charles S. Peirce Society	1176	1975	2024
Utilitas	391	2009	2024

The column ‘First Year’ is *not* the first year the journal published; it is the first year that Web of Science indexed the journal. This often makes a difference; because *Analysis* isn’t indexed before 1975, we don’t get “Is Knowledge Justified True Belief?” (Gettier 1963), or much of the initial literature it generated. Still, we do have a lot of information to work with, as long as we’re careful about the limitations. Similarly, the column ‘Last Year’ is not the last year the journal was published; thankfully most of these journals are still in operation. It’s not even the last year that Web of Science has records for. For most of the journals, there were records for 2022, and even occasional records for 2023. But I stopped the study in 2021 because it was the last year we had something that felt close enough to a full year’s data.

The database is supposed to tell you, for each indexed article, which things it cites. The reliability of this is mixed, especially with citations that are in footnotes rather than in a bibliography. And the data needs a huge amount of cleaning. Eugenio Petrovich (2024) did a similar study to this one focussing on five high profile journals, and his first step was a rather extensive bit of data cleaning.³

That said, for one important class of citations the data seems fairly reliable (at least as far as I could

³See section 4.2.4 of his book for more details on the challenges he faced.

check), and not in need of much cleaning. When the citation is to another article that Web of Science indexes, the database includes the internal reference number of the cited article. By simply filtering for references that have an internal reference of this kind, we can quickly get a fairly accurate record of when the articles in Table 1 cite other articles on the table.

The upside of this approach, as opposed to the more thorough approach that Petrovich used, is that it makes it practical to study a hundred journals over sixty years. The downside is that it means we don't see citations to anything other than journal articles, and articles in these journals in particular. Obviously a full study of the citations in philosophy journals would want to pay some attention to citations of *Philosophical Investigations*, *A Theory of Justice*, *On the Plurality of Worlds*, and many many other books. This is not that 'full study'. Instead it's an attempt to analyse an important part of the citation data; a part that happens to be much easier to access.

So for the most part the method used here is that I downloaded hundreds of XML files from Web of Science and ran some filters on them. This took a few hours – even modern computers struggle to analyse a terabyte's worth of information quickly – but it wasn't that sophisticated. There were only two other things I had to do to fix the data.

The way Web of Science handles the 'supplements' to *Noûs*, i.e., *Philosophical Perspectives* and *Philosophical Issues*, was a little uneven. Some years these are recorded as being their own thing, i.e., with a source name of *Philosophical Perspectives* or *Philosophical Issues*; and some years they are recorded as special issues of *Noûs*. When they were listed as special issues, the citations were extremely unreliable. Some high profile articles are recorded as having no citations until several years after publication. The bibliographic information for the articles themselves was also spotty. So I've manually removed all records that were listed as special or supplementary issues of *Noûs* (and similarly removed the citations to those article that did get tracked).

The other big problem is that for several journals, 1974 is missing from the index. In a couple of cases, 1973 is also missing. And in one very important case, 1971 and 1972 are missing as well. That 'important case' is *The Journal of Philosophy*. Between 1971 and 1974 it published groundbreaking arti-

cles by Harry H. Frankfurt (1971), George Boolos (1971), Paul Benacerraf (1973), Jaegwon Kim (1973), Michael Friedman (1974), Isaac Levi (1974), and David Lewis (1971, 1973b). This seemed like a break in the data that needed fixing if I was going to tell the story correctly. So I used JSTOR to find a full list of articles (as opposed to notes or book reviews) in *Journal of Philosophy* in those years, and then looked through the citations in articles in Table 1 to see which citations were to one of those articles. This did mean I was using a different classification of publications into articles and non-articles, and there are some odd choices.⁴ And it meant I had to do a fair bit of data cleaning just to track down references to those four years.⁵ While I’ve strived to make the data as consistent as possible with the other years, it’s possible that I haven’t succeeded, and some discontinuities around the early 1970s are due to this discontinuity in how the data was acquired.

3 Statistics

The paper uses the journals shown in (?).

Table 2: Journals used in this paper

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
American Philosophical Quarterly	1964	2024	1835	7759	10295
Analysis	1975	2024	2719	7494	14833
Analytic Philosophy	2016	2024	190	2218	501
Archiv für Geschichte der Philosophie	1975	2024	672	1598	1019
Australasian Journal of Philosophy	1975	2024	1736	10463	13439
Biology and Philosophy	1988	2024	1225	6179	4825

⁴Notably, the JSTOR list seemed to exclude the symposium centered around Kenneth Arrow’s “Some Ordinalist-Utilitarian Notes on Rawls’s Theory of Justice”; I’m not sure why that was.

⁵A non-trivial chunk of the cleaning was sorting through the many and varied ways that philosophers have spelled Brian O’Shaughnessy’s name over the years.

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
British Journal for the History of Philosophy	2007	2024	834	2466	1113
British Journal for the Philosophy of Science	1956	2024	1620	9330	13032
British Journal of Aesthetics	1975	2024	1436	3556	3614
Bulletin of Symbolic Logic	1997	2024	443	1326	1139
Canadian Journal of Philosophy	1975	2023	1552	7772	5732
Croatian Journal of Philosophy	2007	2024	376	1901	299
Dialogue	1975	2024	1555	3697	1105
Economics and Philosophy	1986	2024	568	2607	2386
Episteme	2005	2024	586	5196	3127
Ergo	2016	2024	386	5090	867
Erkenntnis	2000	2024	1780	17201	7630
Ethical Theory and Moral Practice	2008	2024	902	5874	2153
Ethics	1955	2024	1673	5762	15689
Ethics and Information Technology	2001	2024	567	1953	1032
European Journal for Philosophy of Science	2011	2024	562	5952	1473
European Journal of Philosophy	1998	2024	994	5839	3023
Heythrop Journal	1975	2024	1559	875	355
History and Philosophy of Logic	1992	2024	522	1447	930
Hypatia	2009	2024	683	1556	1711
Inquiry	1966	2024	1646	7186	4545

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
International Journal for Philosophy of Religion	1975	2024	1149	2183	1135
International Philosophical Quarterly	1961	2023	1588	1464	713
Journal of Aesthetics and Art Criticism	1975	2024	1539	3747	3757
Journal of Applied Philosophy	2006	2024	666	3473	1303
Journal of Chinese Philosophy	1973	2024	1278	1053	964
Journal of Consciousness Studies	2000	2024	1525	4939	3659
Journal of Indian Philosophy	1975	2024	1107	1477	1473
Journal of Medical Ethics	1975	2024	4340	5875	5091
Journal of Moral Philosophy	2005	2024	392	2449	979
Journal of Philosophical Logic	1972	2024	1497	7755	9811
Journal of Philosophical Research	2005	2024	463	2097	573
Journal of Philosophy	1956	2024	2761	7299	37873
Journal of Political Philosophy	1998	2023	609	2303	2886
Journal of Social Philosophy	2008	2024	508	2202	883
Journal of Symbolic Logic	1966	2024	4363	6757	10587
Journal of Value Inquiry	1980	2024	1369	2974	1466
Journal of the American Philosophical Association	2015	2024	340	2764	938
Journal of the History of Ideas	1956	2024	2212	996	1705
Journal of the History of Philosophy	1975	2024	1138	2800	3065
Journal of the Philosophy of History	2010	2024	284	618	187

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
Kant-Studien	1975	2024	1134	1708	1709
Kantian Review	2010	2024	337	1557	649
Kennedy Institute of Ethics Journal	1995	2024	574	1234	931
Law and Philosophy	1982	2024	852	2566	1518
Linguistics and Philosophy	1979	2024	878	5014	6408
Logique et Analyse	2007	2021	340	1565	336
Metaphilosophy	1975	2024	1562	4541	2837
Mind	1956	2024	1980	8454	18442
Mind & Language	1994	2024	893	5807	6363
Minds and Machines	1992	2024	756	3442	1963
Monist	1963	2024	1975	4322	6444
Notre Dame Journal of Formal Logic	2009	2024	486	1661	707
Noûs	1975	2024	1480	11791	20557
Pacific Philosophical Quarterly	1980	2024	1231	7609	6542
Philosophers' Imprint	2010	2024	402	5177	3301
Philosophia	1975	2024	2249	10028	2917
Philosophia Mathematica	2008	2024	243	1613	897
Philosophical Explorations	2008	2024	390	2857	1271
Philosophical Forum	1971	2024	851	1726	612
Philosophical Investigations	1983	2024	708	1057	588
Philosophical Papers	2009	2023	234	1379	444
Philosophical Perspectives	2007	2023	305	3380	3491
Philosophical Psychology	1991	2024	1312	7178	4225

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
Philosophical Quarterly	1975	2024	1450	8660	10722
Philosophical Review	1956	2024	1033	5214	25881
Philosophical Studies	1956	2024	5485	35126	38208
Philosophy	1956	2024	1811	2452	3609
Philosophy & Public Affairs	1971	2024	733	2591	11768
Philosophy Compass	2015	2024	651	7939	1750
Philosophy East and West	1966	2024	1604	1980	1755
Philosophy and Phenomenological Research	1956	2024	3273	15151	21527
Philosophy and Rhetoric	1975	2024	927	1170	893
Philosophy of Science	1956	2024	3259	12888	24991
Philosophy of the Social Sciences	1975	2024	997	2550	1705
Phronesis	1975	2024	783	1227	1620
Politics, Philosophy and Economics	2008	2024	325	2025	779
Ratio	1974	2024	1090	3699	3603
Res Philosophica	2013	2024	360	2176	737
Review of Metaphysics	1956	2024	1616	1499	2434
Review of Symbolic Logic	2008	2024	578	3906	2721
Russell	1981	2024	345	427	303
Social Epistemology	2011	2024	489	2381	1034
Social Philosophy and Policy	1983	2024	973	2108	2550
South African Journal of Philosophy	1987	2024	793	1867	650
Southern Journal of Philosophy	1976	2024	1984	5194	3057

Journal	First Year	Last Year	Articles	Outbound Citations	Inbound Citations
Studia Logica	2010	2024	734	2418	1007
Studies in History and Philosophy of Science	1974	2024	1832	8892	6217
Synthese	1966	2024	7770	64828	32888
Theoria	2007	2024	459	3902	723
Theory and Decision	1970	2024	1936	2101	2280
Thought	2016	2022	219	1537	455
Topoi	1982	2024	1327	5554	2363
Transactions of the Charles S. Peirce Society	1975	2024	1176	1874	1560
Utilitas	2009	2024	391	2480	1147

References

- Benacerraf, Paul. 1973. "Mathematical Truth." *Journal of Philosophy* 70 (19): 661–79.
- Boolos, George. 1971. "The Iterative Conception of Set." *Journal of Philosophy* 68 (8): 215–31.
- Frankfurt, Harry. 1971. "Freedom of the Will and the Concept of a Person." *Journal of Philosophy* 68 (1): 5–20. <https://doi.org/10.2307/2024717>.
- Frankfurt, Harry G. 1969. "Alternate Possibilities and Moral Responsibility." *Journal of Philosophy* 66 (23): 829–39. <https://doi.org/10.2307/2023833>.
- Friedman, Michael. 1974. "Explanation and Scientific Understanding." *Journal of Philosophy* 71 (1): 5–19. <https://doi.org/10.2307/2024924>.
- Gettier, Edmund L. 1963. "Is Justified True Belief Knowledge?" *Analysis* 23 (6): 121–23. <https://doi.org/10.2307/3326922>.

- Kim, Jaegwon. 1973. "Causes and Counterfactuals." *Journal of Philosophy* 70 (17): 570–72. <https://doi.org/10.2307/2025312>.
- Levi, Isaac. 1974. "On Indeterminate Probabilities." *Journal of Philosophy* 71 (13): 391–418. <https://doi.org/10.2307/2025161>.
- Lewis, David. 1971. "Counterparts of Persons and Their Bodies." *Journal of Philosophy* 68 (7): 203–11. <https://doi.org/10.2307/2024902>.
- . 1973b. "Causation." *Journal of Philosophy* 70 (17): 556–67. <https://doi.org/10.2307/2025310>.
- . 1973a. "Causation." *Journal of Philosophy* 70 (17): 556–67.
- Petrovich, Eugenio. 2024. *A Quantitative Portrait of Analytic Philosophy: Looking Through the Margins*. Cham: Springer.
- Singer, Peter. 1972. "Famine, Affluence, and Morality." *Philosophy & Public Affairs* 1 (3): 229–43.
- Thomson, Judith Jarvis. 1971. "A Defense of Abortion." *Philosophy & Public Affairs* 1 (1): 47–66.