



# edhiphy.org

A new digital tool to study  
philosophy and its history

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# Joint Work

- Database design: Eugenio Petrovich, University of Turin
- Part of ERC & NWO project 'Exiled Empiricists': Sander Verhaegh (PI), Claudia Cristalli, Fons Dewulf (now HKUST), Ties van Germert, Nina IJdens, Tilburg University
- Digital Research support: Wessel Dankers (Tilburg)

# Outline

1. From Citations to Mentions
2. Constructing the [edhiphy](#) database
3. Application: the history of Logical Empiricism
4. [edhiphy.org](#)

# TILBURG SCHOOL OF HUMANITIES AND DIGITAL SCIENCES



Digital methods for (the history of) philosophy have a promise in at least two respects:

1. Close reading of historical sources has to be selective - how do we select?
2. How do we check the coarse-grained claims of historical narratives?



# From Citations to Mentions

- Citation analysis is a key method in quantitative studies of science
- (in)famous citation metrics are e.g. the Impact Factor, h-index, etc. But citations have also been used to construct (co-)citation networks
- Formalized citations became common in the early 20<sup>th</sup> century – but reference lists remain rare in philosophy until the 1980s

It appears to me that Prof. Weldon's argument, referred to in *NATURE* of July 16 (p. 245), is accurately represented in the following illustration. It might be an established fact, although it is not in reality, that there was a con-

Cunningham, T. J. 1896 «The Utility of Specific Characters», *Nature* 54 (1396): 295  
<https://doi.org/10.1038/054295a0>

# From Citations to Mentions

But philosophers' practice of referring to other scholars' work is much older

R. M. BLAKE.

## THE JOURNAL OF PHILOSOPHY

## THE PARADOX OF TEMPORAL PROCESS

IT is commonly assumed that the difficulties first raised by Zeno with regard to the possibility of motion have been pretty definitely disposed of in modern times by means of the mathematical analysis of continuity and infinity, in the way made familiar among us, for example, by Mr. Russell. William James, however, among others, remained to the end unconvinced of the validity of these modern solutions of the ancient problem, and in our own day Professor Whitehead also asserts the existence of an outstanding and unresolved difficulty. The residual problem is essentially the same for both James and Whitehead, and both of them propose to deal with it in much the same way. I wish here to enquire (1) What is the nature of the problem which men like James and Whitehead feel to be still outstanding? (2) Is the type of solution which they propose adequate to deal with the problem? and (3) Is the problem not really soluble in terms not involving the novel conceptions which they employ for this purpose?

James distinguishes between two types of infinite, called by him respectively the "standing" infinite and the "growing" infinite. To the first class belong infinities conceived as *already completed*, such as the infinite of space, of past time, of events now finished, of motions already accomplished, and the like. To the second belong infinities in *process* of completion, such as the infinities of motion, change, activity, conceived as actually occurring. In James' view the difficulties of the first sort of infinite are on the whole sufficiently disposed of by the modern mathematical treatment; but those of the second sort still remain unsolved. As he explains the matter, "Zeno's and Kant's dialectic holds good wherever, before an end can be reached, a succession of terms, endless by definition, must needs have been *successively* counted out. This is the case with every process of change, however small; with every event which we con-

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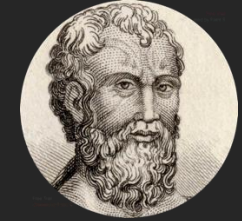
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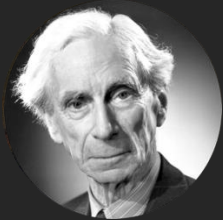
Zeno



William James



Immanuel Kant



Bertrand Russell



A. N. Whitehead

# From Citations to Mentions

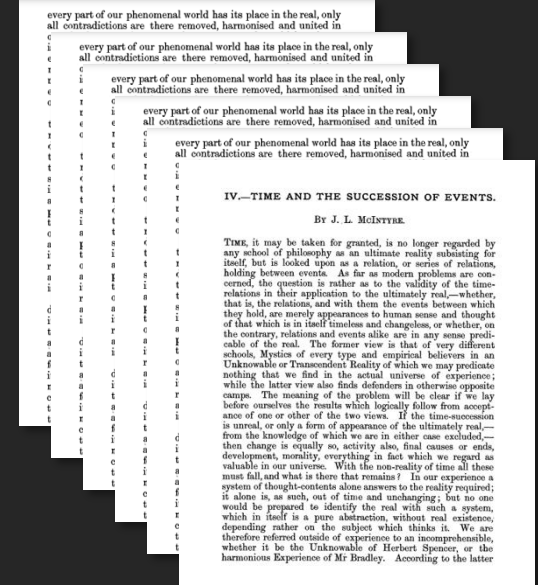
But philosophers' practice of referring to other scholars' work is much older

We define a 'mention' as a generalized form of reference to a philosopher: a **link between a document and a scholar**. In an explicit mention, this link is realized by the occurrence of a **proper name**

# Constructing the edhiphy database

- With the concept of a ‘mention’ we can construct a database to describe the structure of philosophy (similar to what the ‘Web of Science’ did with citations)
- The Ingredients:
  - A corpus: 22,977 articles from 12 English-speaking journals\* between 1890 and 1980
  - Metadata for 44,376 philosophers, including partial PhD and affiliation data

\* Analysis, Mind, Phil. Studies, Philosophy, PPR, Phil. of Science, Proc. Arist. Soc., Synthese, J.Phil., Monist



# Constructing the edhiphy database

Of course it is not that simple:

- Non-trivial cleaning (e.g. journal headers)
- But the main obstacle is the *disambiguation* of homonymous author names



Bertrand Russell



Walter C. Russell



Leonard J. Russell



Francis C. Russell



# Constructing the edhiphy database

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VOL. XXIII., No. 24.

NOVEMBER 25, 1926

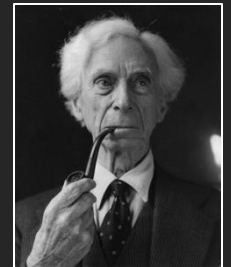
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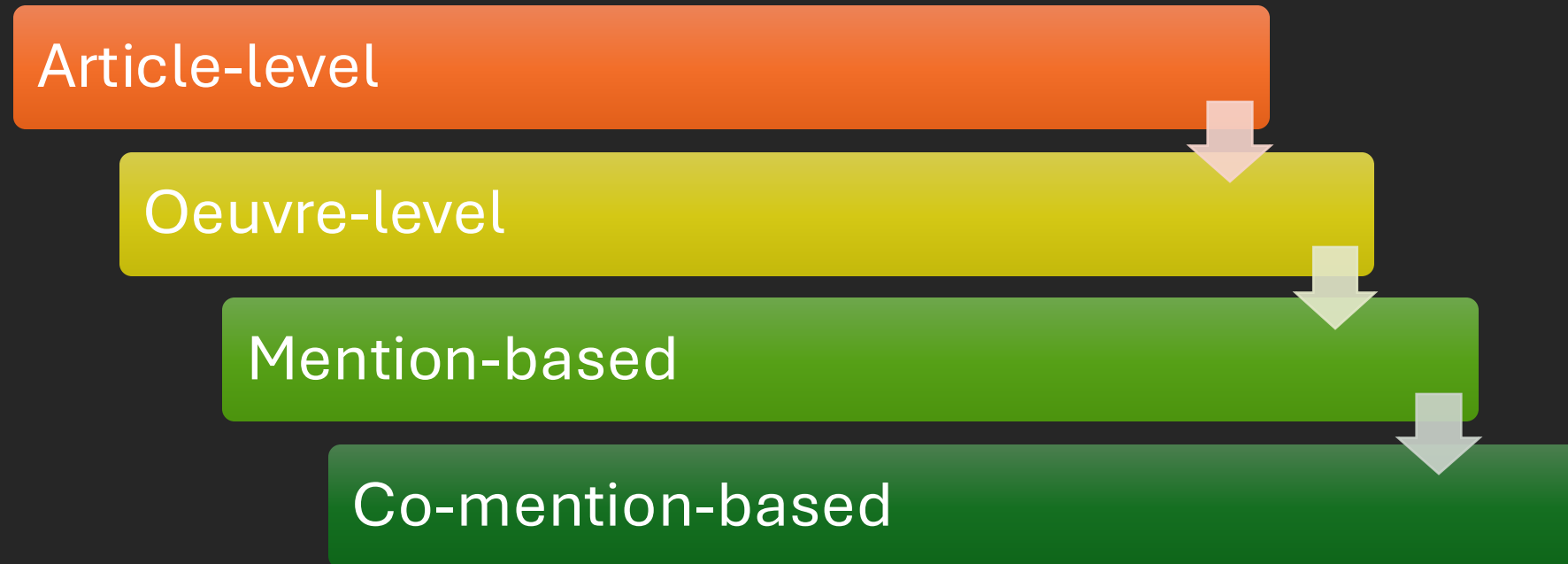
Bertrand Russell | P:664

+450.000 mentions in EDHIPHY are homonymous!



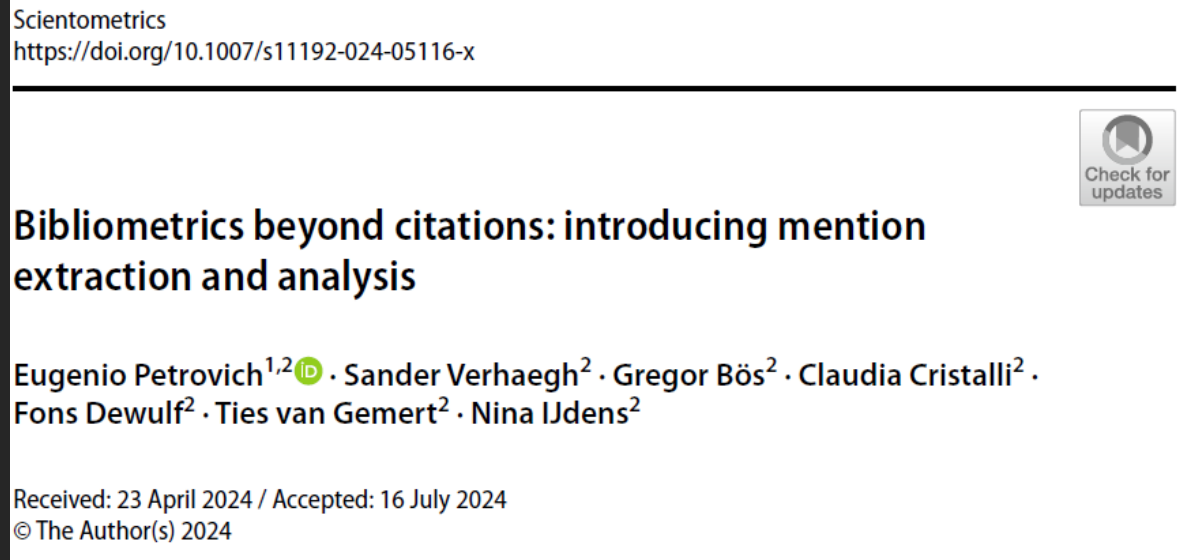
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- Multiple Disambiguation Strategies are used successively:



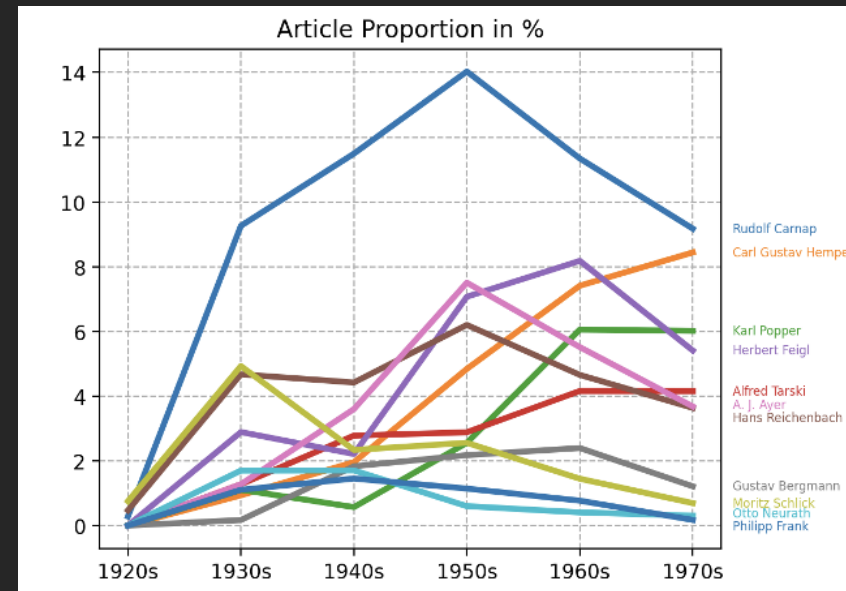
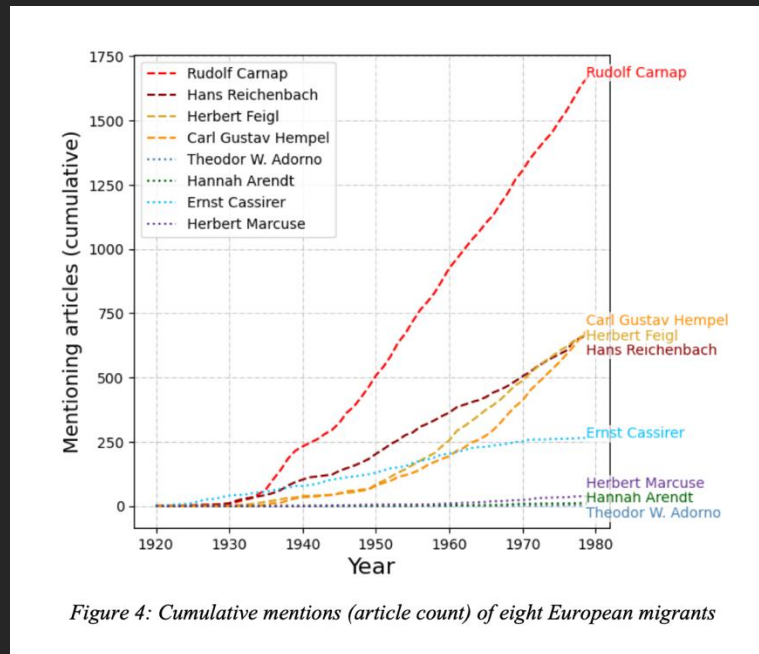
# Constructing the edhiphy database

- We currently estimate the accuracy of the extracted mentions to be **82%-91%**
- More in:



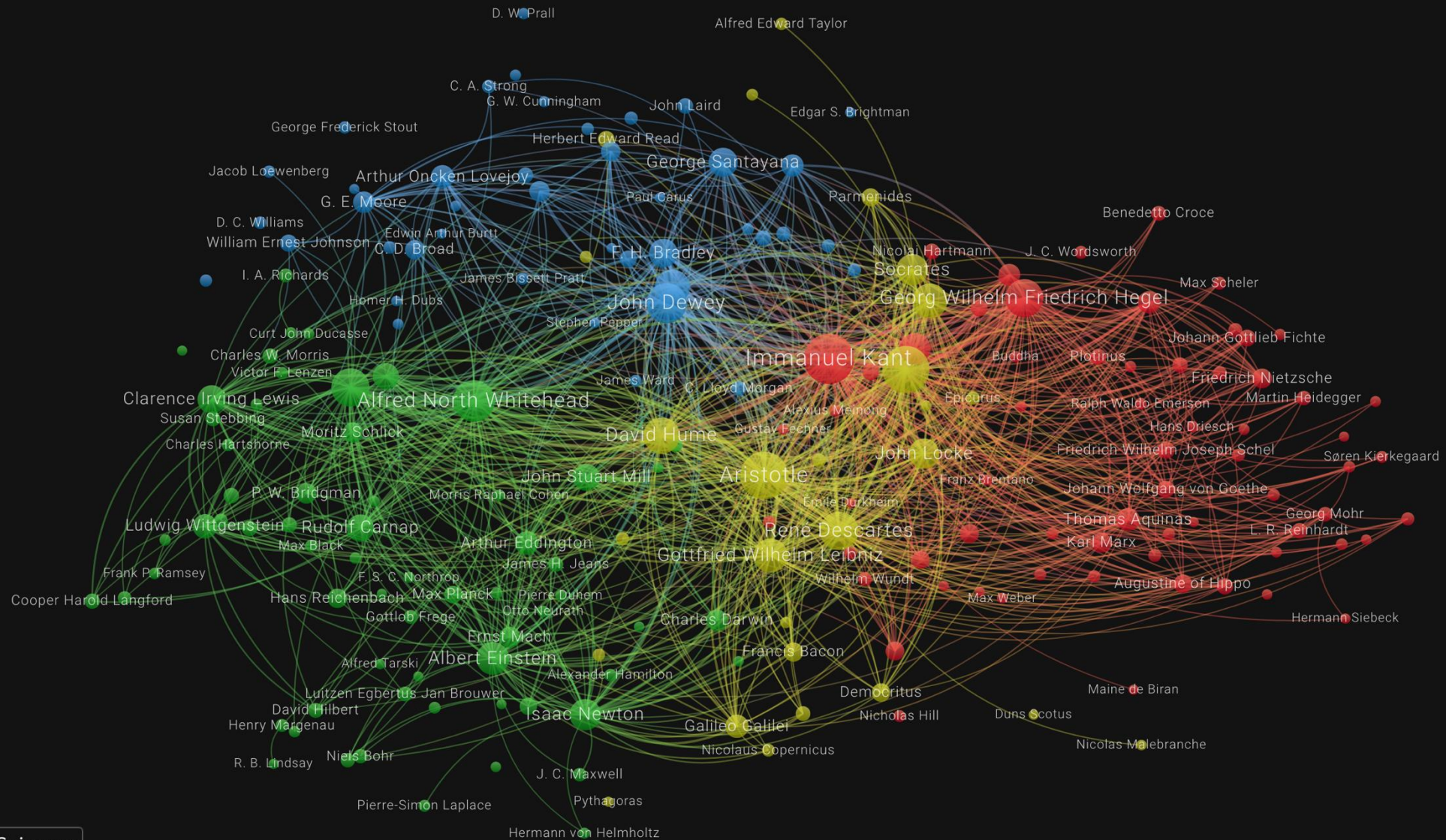
<https://doi.org/10.1007/s11192-024-05116-x>

# Application: the history of Logical Empiricism

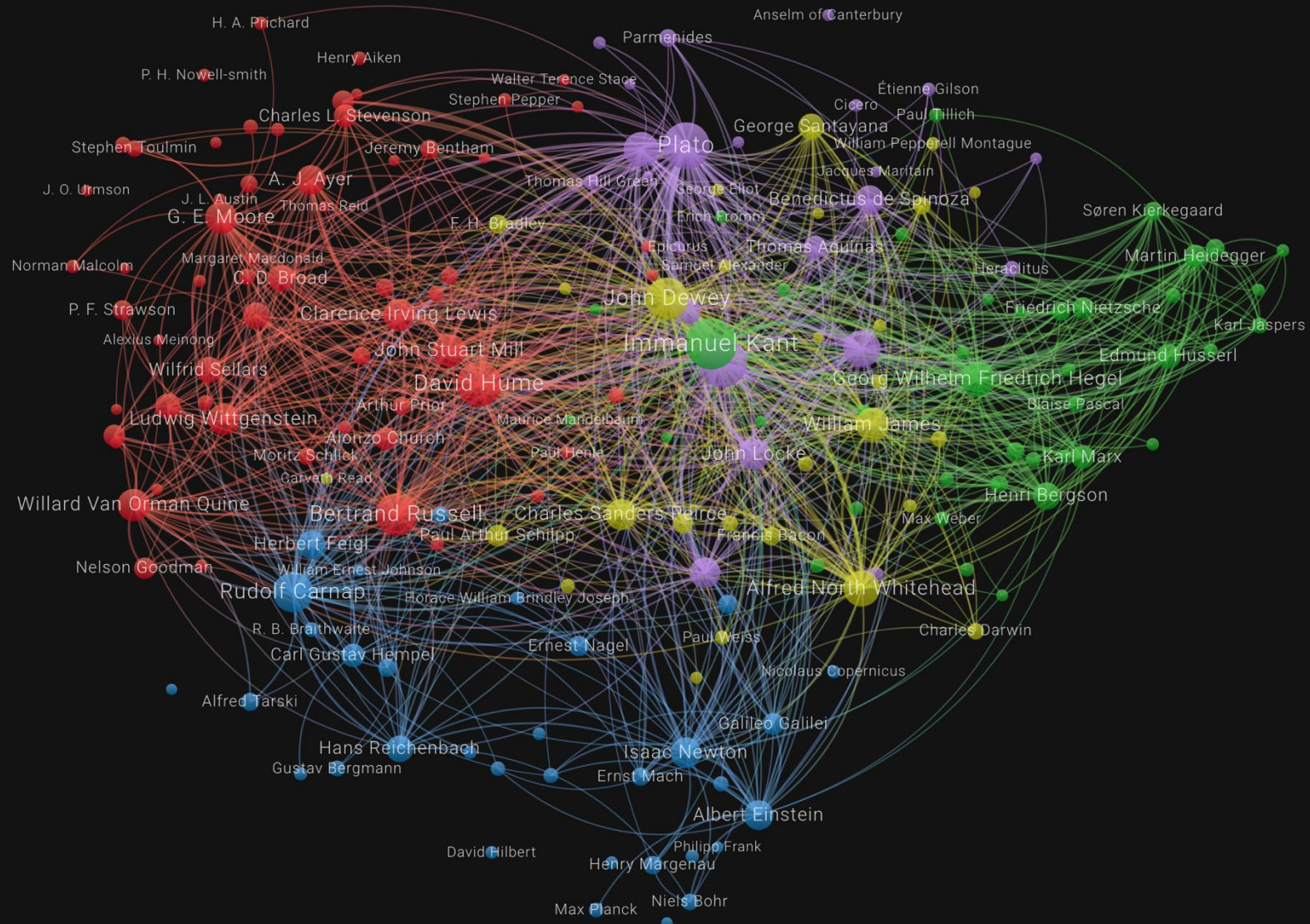


*Mention statistics of eleven logical empiricists in philosophy journals by decade.*

See Verhaegh, S., Petrovich, E. and Bös, G.E. (forthcoming) 'The American Reception of Logical Empiricism: A Mention-Based Bibliometric Analysis', in F. Stadler and G. Schiemer (eds) *The Vienna Circle - History and Legacy*. Springer (Vienna Circle Institute Yearbook). Preprint available on <https://edhiphy.org/publications>







Philosopher co-occurrences in American Philosophy 1951-1960.  
Logical Empiricists are clustered with Scientists



# edhiphy.org

- The edhiphy database is now available as a web-application. This allows you to:
  - Inspect individual philosophers
  - Study aggregate mentions over periods
  - Inspect the co-mention links between philosophers
  - Search the extracted mentions
  - Create custom network plots
  - Submit custom SQLite queries

<https://edhiphy.org>