ORIGINAL RESEARCH



A quantitative history of ordinary language philosophy

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Abstract

There is a standard story told about the rise and fall of ordinary language philosophy: it was a widespread, if not dominant, approach to philosophy in Great Britain in the aftermath of World War II up until the early 1960s, but with the development of systematic approaches to the study of language—formal semantic theories on one hand and Gricean pragmatics on the other—ordinary language philosophy more or less disappeared. In this paper we present quantitative evidence to evaluate the standard story of the rise and fall of ordinary language philosophy, building on the topic model of over 30,000 philosophy articles in Weatherson in (*A History of Philosophy Journals, Volume 1: Evidence from Topic Modeling*, 1876–2013, 2022). Using a combination of qualitative judgment and a topic-model-based measurement of similarity between individual articles, we find evidence that supports the first part of the standard story, according to which ordinary language philosophy arises in the 1940s, peaks between the early 1950s and the late 1960s, and then rapidly declines. But we argue that there is also evidence of a "new wave" of ordinary language philosophy in the early twenty-first century that defies the second part of the standard story.

Keywords Ordinary language philosophy \cdot Digital humanities \cdot Topic models \cdot Contextualism \cdot Experimental philosophy

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1 The standard story of the rise and fall of ordinary language philosophy

Ordinary language philosophy is an approach to philosophical problems motivated by the thought that paying attention to the way that language is used in ordinary (that is, *non-philosophical*) talk can transform our understanding of traditional philosophical problems and reveal previously unasked questions that deserve philosophical attention.¹ There is a standard story told in histories of analytic philosophy about the rise and fall of ordinary language philosophy: it was a widespread, if not dominant, approach to philosophy in Great Britain in the aftermath of World War II up until the early 1960s, but with the development of systematic approaches to the study of language—formal semantic theories on one hand and Gricean pragmatics on the other—ordinary language philosophy more or less disappeared (Chapman, 2005; Forguson, 2001; Mulhall, 1994, 2017; Parker-Ryan, 2012; Soames, 2003; Stanley, 2008; Travis, 1985; von Wright, 1993; Warnock, 1998):

[The label 'ordinary language philosophy'] was supposed to identify a certain kind of philosophy that flourished...for twenty years or so, roughly after 1945. (Warnock, 1998)

Ordinary language philosophy flourished in Oxford from the late 1940's to the early 1960's. (von Wright, 1993, p. 40)

By the mid-1960s... [ordinary language philosophy] was already in decline...Ordinary language philosophy is now a historical movement, rather than an active force in contemporary philosophical discussion. (Forguson, 2001, p. 326)

How do we know whether the standard story about the rise and fall of ordinary language philosophy is true? There are tens of thousands of articles in philosophy journals published since what is considered the heyday of ordinary language philosophy, and no one has examined them all for signs of life. Is it possible that ordinary language philosophy wasn't killed off in the late 1960s, but survives into the present in the pages of those journals in a way overlooked in the standard story?

Working with the topic model of 32,183 philosophy articles in Weatherson (2022), we evaluate the standard story of the rise and fall of ordinary language philosophy. We build on Weatherson's large dataset and carefully documented methodology by combining computational methods with a familiar kind of archival research—qualitative classifications, data organization, and reading. We find evidence that supports part of the standard story, but we argue there is also evidence of a "new wave" of ordinary language philosophy since the early 2000s, appearing in the guise of contextualist theories in epistemology and ethics and certain versions of experimental philosophy. The

¹ This characterization of ordinary language philosophy is meant to be broad enough to encompass the diverse approaches to philosophical problems used by those philosophers who have been grouped together under the label. See Grice (1986, p. 51) for a similarly broad characterization of what would have "commanded universal assent" among the members of Austin's Saturday Morning "Play Group", which included P.F. Strawson, Stuart Hampshire, David Pears, G.J. Warnock, J.O. Urmson, H.L.A. Hart, and R.M. Hare. Treating "ordinary" as meaning "non-philosophical" is common among commentators on ordinary language philosophy (Cavell 1964, p. 953; Urmson 1965, p. 504 n. 3).

standard story needs to be rewritten: Ordinary language philosophy was not killed off in the 1960s; it went into hibernation for 30 years and has woken up in the twenty-first century.

2 Quantitative evidence and the standard story

Weatherson (2022) models the discourse in more than 30,000 philosophy articles drawn from 12 leading journals over the period 1876–2013.² In technical terms, he uses a Latent Dirichlet Allocation (LDA) to build a model of 90 topics using filtered lists of word frequencies for each article. The topics essentially represent the best guess of an algorithmic process that sorts articles based on the words they use. The results can be understood from the standpoint of the articles (which are assigned a probability of being "in" each topic), the words (which are assigned a probability of appearing in an idealized article from each topic), or the topics (which comprise these article and word weights). For example, Jessica Brown's "Knowledge and Assertion" (2010) is assigned a 66% likelihood of being in the 74th topic, and the words most likely to appear in this topic include "knowing", "skepticism", and "epistemology." On the basis of articles and words like these, Weatherson calls Topic 74 "Knowledge".

Topic models depend on a mix of quantitative computational analysis and subjective judgment calls. The experimenter decides the number of topics that the model will find, as well as the subset of words from the corpus that will be included in the process. The method also involves randomization, which means similar parameters can produce substantially different results. Finally, the "topics" are statistically rather than conceptually derived; Topic 74 is really just a relationship between articles and words, and Weatherson's decision to call it "Knowledge" depends on his own expertise and interpretation of the results. Weatherson is candid about the tradeoffs involved in making his decisions about which words to exclude, how many topics to include, and other adjustments needed to make a meaningful model (see Weatherson, 2022, Sect. 1), but for our purposes the important lesson to keep in mind is that the topic model data he has created depends on a combination of subjective and objective factors.³

We build on Weatherson's work, using his topic model classifications in part to take advantage of the substantial intellectual labor he has already expended and explained. Instead of creating our own topic model, our primary intervention will be the refinement of the way his model represents the history of ordinary language philosophy, which

² The journals are Analysis, British Journal for the Philosophy of Science, Ethics, Journal of Philosophy, Mind, Noûs, Philosophical Review, Philosophy and Phenomenological Research, Philosophy and Public Affairs, Philosophy of Science, Proceedings of the Aristotelian Society, and The Philosophical Quarterly. These journals were picked to capture both important generalist journals and coverage of important subfields, namely ethics and philosophy of science—see Weatherson (2022, Sect. 1.1) for discussion of his selection process.

³ Weatherson is up front about the subjective aspect of his methods. The detailed account of his process given in his methodology section make it a useful example for anyone who wants to work with or use topic models. Topic models have recently been used to understand historical trends in philosophy of science through philosophy of science-focused journals (Malaterre et al., 2019; Malaterre et al., 2020; Malaterre et al., 2021), and qualitative coding of papers drawn from a sample of journals has been used to track the use of logic (Bonino et al., 2021) and formal methods more generally understood (Fletcher et al., 2021) in philosophy over time.

includes a lot of false positives (articles that are not really about or examples of ordinary language philosophy) and some false negatives (missing articles, especially toward the end of the period he covers, that are examples of, or are about, ordinary language philosophy). Ordinary language philosophy is only one of 90 areas of philosophical inquiry that Weatherson examines, so it makes sense that his model doesn't track its trajectory with complete accuracy. Since we are focused just on this narrow field instead of trying to represent more than a century of philosophy in general, we can dig into the limitations of the generalized topic model approach. When we understand those limitations, we can work toward getting as accurate a picture of the historical trajectory of ordinary language philosophy as possible (in terms of articles in Weatherson's corpus), giving us a more focused—narrower, but clearer—view of the history of this particular approach to philosophical problems.

Rather than automating the detection of ordinary language philosophy papers to arrive at something like a probabilistic prediction of the frequency of their publication, we wanted instead to surface as many examples as we could without leaving the specific articles behind—in other words, we wanted to base our identification of articles as ordinary language philosophy on their content, which required actually *reading* them. We chose this approach for three reasons. First, we wanted to build on the work Weatherson has already done. Second, our method is relatively easy to implement and understand, making it a useful site of simplicity in a complex inquiry. Finally, we were guided by the literary digital humanities scholar Lauren Klein's observation that:

A topic model is, after all, a model. And for the model to be truly meaningful, domain experts—that's us—must be able to probe the semantic associations that the model proposes, and seek out additional perspectives on the model, as well as on the archive itself.

Topic modeling, Klein says, is "a technique that stirs the archive". In what follows, we use Weatherson's topic model to stir the archive in search of ordinary language philosophy.⁴

2.1 Weatherson's Topic 24: "Ordinary Language Philosophy"

One of the most prominent topics in Weatherson's model he labels "Ordinary Language Philosophy" (topic 24). Weatherson says that ordinary language philosophy has such a large presence in the journals he surveys that it "almost breaks the model" (Weatherson,

⁴ http://web.archive.org/web/20230313080358/http://lklein.com/archives/the-carework-and-codework-

of-the-digital-humanities/. If we had wanted a more automated approach, we had several options. For example, we might have tried to download all the articles, get word frequency data, and use simple distance/similarity metrics, or clustering approaches (like k-means). Interactive topic modeling (Hu et al., 2014) is another method that is arguably similar to ours, in the sense that it integrates user assessment of topics into an interactive topic-modeling approach. These approaches would have been promising if we were more interested in improving Weatherson's topic model rather than simply using his work to build a better history of ordinary language philosophy. Our approach to Weatherson's topic model can therefore be described as *instrumentalist* in Pääkkönen and Ylikoski's (2021) sense, where models "indicate where the evidence relevant for evaluating interpretations could be found" (p. 1478).

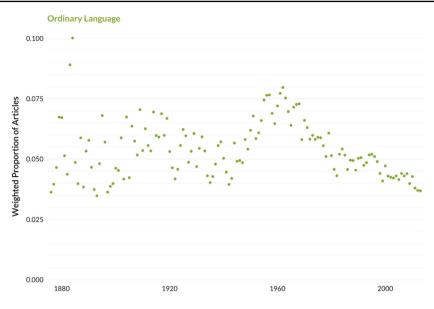


Figure 2.60: Ordinary Language

Fig. 1 Weatherson (2022, Sect. 2.24) Topic 24, "Ordinary Language", Weighted Proportion of Articles Over Time

2022, Sect. 0).⁵ And in the chart of weighted proportion of all articles (Weatherson, 2022, Fig. 3.2), "Ordinary Language Philosophy" (topic 24) displays a pattern that defies the standard story of the rise and fall of ordinary language philosophy: it does peak in the early 1960s, followed by a drop, but then it levels off and remains one of the largest topics through 2013 (the end of the period surveyed in Weatherson's model).⁶ It also appears that many articles in topic 24 appear before ordinary language philosophy becomes popular on the standard story, roughly the mid 1940s (see Fig. 1).

Some commentators on Weatherson (2022) have taken the shape of Topic 24 to be a challenge for the standard story:

Ordinary language is a topic on the top five list for every decade, and is the most popular topic from the 1950s through the present. And yet "ordinary language

⁵ Weatherson writes: "...there is nothing [in the model] like the dominance of ordinary language philosophy in the mid-century. If you cut down the number of topics to under thirty, then something like idealism becomes a single topic that is similarly large in the early years... And if you keep the number of topics under about 50 (or even 60), then sometimes the model will put all of epistemology into a single topic, and its size in the 2000s is as big as ordinary language philosophy in the 1950s. But in this model—and in the vast majority of other models I looked at—ordinary language philosophy after the war is bigger than any other model at any time" (Weatherson 2022, Sect. 3.1).

⁶ "Weighted sum of articles" is calculated as follows: "for each topic-year pair, it looks at all the articles published that year, and sums the probability they are in that topic" (Weatherson 2022, Sect. 3.1). Weatherson also uses the weighted *proportion* of articles (as in Fig. 1), which divides this sum by the total number of articles each year in order to control for "the variation in the number of articles and pages being published each year" (Weatherson 2022, Sect. 3.2).

philosophy" would generally be thought to have arisen in the 1940s and declined permanently in the 1960s.⁷

What explains the conflict between Weatherson's "Ordinary Language Philosophy" topic and the standard story?

While the results of the topic model frequently align with recognizable philosophical concepts, the model itself does not have a human-like grasp of word meanings or concepts. It simply tracks word frequencies and their variations in articles. As a result, it may capture linguistic phenomena that are not ultimately attributable to the discussion of particular philosophical content. Weatherson observes at several points in his book that what topic 24 is tracking is "as much a style as a topic" (Sects. 2; 2.47; 9.1):

The big assumption that drives the kind of model I'm building is that there is a one-one mapping between classes of articles with a distinctive vocabulary, and classes of articles with a distinctive subject matter. That often holds true, but it breaks quite spectacularly in 1950s Britain. A new language, shorn of pomp and circumstance, takes over. And my poor model thinks that all the philosophers have moved on to a wholly new subject matter. But they largely have not—they are just discussing the old subjects using new words. (Weatherson, 2022, Sect. 0)⁸

That the topic that Weatherson labels "Ordinary Language Philosophy" is not really tracking the philosophical ideas that make something a work of ordinary language philosophy is evident from the 10 articles that the model assigns the highest probability to be in topic 24 (Table 1).

Out of these 10 articles classified as the most probable to belong to Weatherson's Topic 24, the Broadie article "Trying and Doing", Wisdom's Inaugural Address to the Aristotelian Society, and Woozley's "Knowing and Not Knowing" are examples of ordinary language philosophy, or criticisms of it: Broadie undertakes an analysis of the complexity of the expression "trying" in order to "[throw] a subtler light on the concept of action", and Wisdom aims to disambiguate different ordinary interpretations of the question "Can one ever really know the mind of another?" as a way of dissolving the philosophers. Both of these are paradigmatic ordinary language approaches to philosophical problems. A.D. Woozley's article, "Knowing and Not Knowing", is a clear example of an article criticizing ordinary language philosophy: it challenges the idea that we can draw conclusions about knowledge on the basis of how we ordinarily use the word "know" in assertions.

The other articles in the top 10 of topic 24 are a very mixed bag: The top two articles are both satirical: Lafleur's "The R-Being" is an attempted *reductio* of the

⁷ https://web.archive.org/web/20221205122809/https://understandingsociety.blogspot.com/2020/06/abig-data-contribution-to-history-of.html.

⁸ The "topic keywords" are words in a topic that have the highest ratio between "the probability the word turns up in this topic with the probability it turns up in an arbitrary article", with the restriction that "Roughly, they...turn up at least once in every 20000 words (excluding stop words)" (Weatherson 2022, Sect. 2). The topic keywords that Weatherson lists for Topic 24 are "ask, certainly, really, surely, try, anything, quite, answer, else, answers, tell, think, put, saying, perhaps".

Author	Title	Year	Journal
Lawrence Lafleur	The R-Being	1942	Philosophy of Science
Thomas Storer	Miniac: World's Smallest Electronic Brain	1962	Analysis
Ned Markosian	The Paradox Of The Question	1997	Analysis
Theodore Sider	On The Paradox Of The Question	1997	Analysis
Frederick Broadie	Trying And Doing	1966	Proceedings of the Aristotelian Society
D.H.J. Warner and A.C. Ewing	Reply To First And Second Thoughts In Moral Philosophy	1965	Mind
Gardner Williams	The Individual Aspects Of Ethics–A Reply To Professor Garnett	1949	The Journal of Philosophy
John Wisdom	The Inaugural Address: A Feature Of Wittgenstein's Technique	1961	Proceedings of the Aristotelian Society
G.E. Hughes	Report On Analysis "Problem" No. 17	1979	Analysis
A.D. Woozley	Knowing and Not Knowing	1953	Proceedings of the Aristotelian Society

Table 1 Top 10 Articles in Weatherson (2022) Topic 24, "Ordinary Language Philosophy"

ontological argument by showing the absurdities that arise from imagining a being that has every property that begins with the letter "R"; Storer's "Miniac: World's Smallest Electronic Brain" gives "do-it-yourself plans for constructing a computer that will answer questions not resolvable by any other present machine", where the instructions consist of gluing pieces of paper with "YES" and "NO" written on them to both sides of a coin. The Markosian and Sider articles concern a puzzle about what the best question would be to ask an omniscient angel if philosophers were given that opportunity. The "Reply to First and Second Thoughts in Moral Philosophy" by Ewing accuses his critic Warner of conflating epistemic and metaphysical senses of "might". Williams's "Reply to Professor Garnett" is a response to a comically uncharitable misconstrual of Williams's utilitarian ethical theory.⁹ Finally, Hughes's "Report on Analysis 'Problem' No. 17" poses the question "Can I ever, by my subsequent actions, bring it about that something I did on a previous occasion was done from a certain motive rather than from some other one?", which the author chose on the ground that

⁹ "Mr. Garnett tries to show that the implications of my definitions are too horrible to accept. *Prima facie* and as he states them they do sound pretty bad, but that is partly because popular thought is sentimental, and partly because his statement is incomplete. Consider the example of a murderer committing ten more utterly fiendish murders in order to escape execution for his earlier crime. If he thereby succeeds in saving his own life, if his conscience does not bother him too much, and if he is actually better satisfied, in the long run, then he is right in committing the murders,—but Mr. Garnett obscures the issue by omitting to add the indispensable phrase 'from the criminal's own point of view'" (Williams 1949, p. 473).

in his experience it had provoked interesting discussion. But Hughes laments that in spite of how interesting he found the question, *Analysis* did not receive any attempts to answer it!¹⁰

Weatherson points out that another measure of how topic 24 is not really picking out a substantial topic is that many of the list of highly cited articles that appear in topic 24 are "only loosely connected" to what would be considered ordinary language philosophy (Weatherson, 2022, Sect. 2.82). By our count, only 6 out of the top 30 most cited articles in topic 24 are examples of ordinary language philosophy, and the top 5 most cited articles in topic 24 include Frege's "The Thought", Michael Walzer's "Political Action: The Problem of Dirty Hands", and Frank Jackson's "Epiphenomenal Qualia", none of which are examples of ordinary language philosophy.

A further measure of the diffuseness of topic 24 is its high probability for articles across the board. On average, the model assigns each article about a 1% chance of being in a given topic, but this varies widely from one topic to the next. At the low end, articles are assigned to topic 79 ("Races and DNA") just 0.4% of the time, or one out of every 250 articles. For topic 24, the average probability is 5.4%, the highest of any topic by a wide margin: If we draw an article at random, we have a better than one in twenty chance that it's in topic 24.¹¹

Importantly, articles are assigned a likelihood for *every* topic. The prevalence of topic 24 doesn't just mean that there are many articles in topic 24; it means that even articles assigned to some other topic are apt to have relatively high "topic 24 scores". And in fact, "lots of topics are such that articles in them look a lot like Ordinary Language Philosophy [topic 24]"—that is, lots of topics display high "cross-topic probability" with topic 24:

For a pair of topics $\langle x, y \rangle$, look at the articles that are more likely in topic x than any other topic, and find the average probability that these articles are in y. (Weatherson, 2022, Sect. 8.5)

Of the 25 highest cross-topic probabilities that Weatherson charts with this method, ten involve topic 24. This is precisely what we would expect given the prevalence of the topic overall, but it underscores the notion that topic 24 reflects some kind of broader linguistic phenomenon than the "Ordinary Language Philosophy" name captures. It's theoretically possible that ordinary language philosophy has had an unmatched, overwhelming presence in the entire field of philosophy over the past 130 years, but it seems more likely that topic 24 is charting something else.

These features of topic 24 mean that its continuing prevalence in Weatherson's model up through 2013 does not pose a challenge to the standard story of the rise and fall of ordinary language philosophy, though Weatherson suggests that it may

¹⁰ Michael Kremer describes the origin of *Analysis*'s Problem series as follows: "In 1951, Margaret Mac-Donald, then editor of Analysis, began a series of 'problems' which were to be answered in 600 words or less. Each problem was set by a well-known philosopher of the time, and the answers were evaluated by the same philosopher. A report and several 'winners' were printed in a subsequent issue. The sequence continued until 1958 – MacDonald had died in 1956 and I guess that the last couple had already been commissioned before her death. It picked up again in 1976 with a few more entries until 1984". (https:// web.archive.org/web/20220215152139/https://twitter.com/m_j_kremer/status/1264377094563336193).

¹¹ The second place topic (coincidentally topic 2, "Idealism"), has a probability of 3.5%.

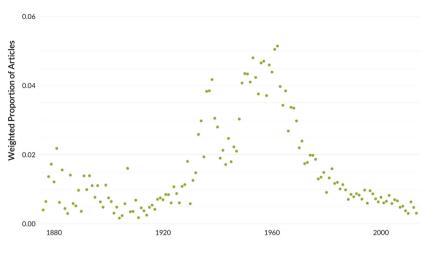


Figure 2.56: Meaning and Use

Fig. 2 Weatherson (2022, Sect. 2.22) Topic 22 "Meaning and Use", Weighted Proportion of Articles over Time

be tracking one important legacy of ordinary language philosophy, namely its lasting effect on the linguistic *style* in which analytic philosophy is written.

If the trajectory of topic 24 does not contribute to confirming or disconfirming the standard story of the rise and fall of ordinary language philosophy, is there any other evidence from the topic model that does? We think topic 22 ("Meaning and Use") is the next best place to start to look for such evidence.

2.2 Topic 22: "Meaning and Use"/ "Wittgensteinian Philosophy of Language"

Topic 22, which Weatherson calls "Meaning and Use" or "Wittgensteinian philosophy of language", is a better measure of ordinary language philosophy, rather than the ordinary style of writing philosophical prose that topic 24 appears to be tracking.¹² The weighted proportion of articles in topic 22 over time mirrors the standard story of the rise and fall of ordinary language philosophy, peaking in the early 1960s and then rapidly declining (see Fig. 2).

The top 10 most likely articles to appear in topic 22 contain four articles that are clear examples of ordinary language philosophy, or criticisms of ordinary language philosophy:

¹² The topic keywords for topic 22 look more like they are tracking ordinary language philosophy than the keywords associated with topic 24. They are: "wittgenstein, ryle, word, usage, words, talking, signs, verbal, language, expressions, sign, moore, uses, grammatical, remark" (Weatherson 2022, Sect. 2.22).

Author	Title	Year	Journal
Alan R. White	The Use of Sentences	1956	Analysis
John Passmore	Professor Ryle's Use of "Use" and "Usage"	1954	Philosophical Review
Manley Thompson	When Is Ordinary Language Reformed?	1961	Journal of Philosophy
Norman Malcolm	Moore's Use of "Know"	1953	Mind

Three of the top 10 articles are examples of Wittgenstein exegesis:

Author	Title	Year	Journal
Cora Diamond	Logical Syntax in Wittgenstein's Tractatus	2005	The Philosophical Quarterly
Carolyn Black	Philosophical Investigations Remark 43 Revisited	1974	Mind
Leonard Linsky	Wittgenstein on Language and Some Problems of Philosophy	1957	The Journal of Philosophy

Wittgenstein's relationship to paradigmatic ordinary language philosophy is contested.¹³ For example, Dummett (1978, p. 433) claims that "Wittgenstein's later philosophy is totally distinct both from logical positivism and from the ordinary language movement", while Cavell (1962) makes the case for some significant overlap between ordinary language philosophers like Ryle and Austin and Wittgenstein in the way that ordinary language is appealed to in approaching philosophical problems.

Some of the articles that concern Wittgenstein clearly should be counted as examples of ordinary language philosophy, like those articles that relate Wittgenstein to the methodology of ordinary language philosophy (paradigmatically Cavell, 1962), and work inspired by Wittgenstein that concerns aspects of ordinary language (Wisdom, 1936, Waismann, 1951, for example). Some of the articles that concern Wittgenstein are not as obviously examples of ordinary language philosophy, like articles that are primarily interpretations of the private language argument. We decided to include work about Wittgenstein's middle period and late philosophy in our count of articles about ordinary language philosophy, but we also tagged these articles as being about Wittgenstein, so it would be easy to exclude them from the overall count if someone wanted to see what the overall trajectory of ordinary language philosophy looks like

¹³ For an overview of the controversy, see Avramides (2017). For a close examination of the relation between Wittgenstein and J.L. Austin, see Harris and Unnsteinsson (2018), and for the broader intellectual historical context, see Hacker (1996, Ch. 6) and Krishnan (2023).

without Wittgenstein exegesis (see Fig. 4 for the count of articles tagged as being about later Wittgenstein over time).

The remaining three articles in the top 10 of Weatherson's topic 24 concern Saussure's comparison of language with the game of chess, Carnap's "formal mode of speech", and "heterological" and "homological" predicates—that is, predicates that refer to properties that either do or do not apply to the predicate itself.

Author	Title	Year	Journal
Maurice Mandelbaum	Language and Chess: De Saussure's Analogy	1968	The Philosophical Review
C.D. Hardie	The Formal Mode of Speech	1936	Analysis
Joshua C. Gregory	Heterological and Homological	1952	Mind

Weatherson's topic 22 is collecting several distinct philosophical debates, so we can't draw conclusions about the accuracy of the standard story just from the rise and fall of this topic in Weatherson's model. Moreover, topic 22 is the fifth most common topic overall. So while it is not as common as topic 24, it is still relatively likely to appear as a significant topic for articles across the board. Again, this points to the possibility that it doesn't reflect the kind of narrow conceptual focus that other topics seem to display. What unity there is in topic 22 seems to be a focus on metalinguistic facts: facts about words, about use (and "usage"), and about word meaning.

So what use are these automatically assembled topics for understanding the standard story of the rise and fall of ordinary language philosophy if they collect what philosophers would consider distinct philosophical debates together? We think the best use of LDA in understanding the history of philosophy is as a method of directing attention to overlooked parts of the history of philosophy, a "tool for reading"¹⁴:

Effective use of topic models depends on validation by human coders to avoid 'reading the tea leaves'—finding spurious, meaningless patterns—that can be created by unsupervised models. The results produced by an algorithm should never be the end game of research: instead, these results should provoke further interpretive analysis. (Mohr et al., 2020, p. 171)

Using Weatherson's topics 22 and 24 as tools for reading, for "stirring the archive", we can sift through thousands of articles ordered in terms of their likelihood of belonging to those topics and "hand code" articles that are clearly examples of ordinary language philosophy. The resulting list of articles that are clear examples of ordinary language

¹⁴ Chris Bail attributes this description of topic modeling to David Mimno: https://web.archive.org/web/ 20220717170025/https://cbail.github.io/SICSS_Topic_Modeling.html.

philosophy will begin to give us a way of verifying the standard story within the corpus of articles collected in Weatherson (2022).

3 Hand-coding examples of ordinary language philosophy using Weatherson's Topics 22 and 24

To get a sense of how far down the list of articles in Weatherson's topics we need to look to find examples of ordinary language philosophy, we can begin by picking out some canonical examples in Weatherson's corpus and seeing where they are located in topics 22 and 24. Table 2, below, is a list of canonical articles in ordinary language philosophy or criticisms of ordinary language philosophy, assembled from articles included in Weatherson (2022) that are cited in either the *Internet Encyclopedia of Philosophy* article on ordinary language philosophy (Parker-Ryan, 2012) or in the chapters on ordinary language philosophy in Soames's history of analytic philosophy

Author	Title	Year	Journal	Topic 22 Rank	Topic 24 Rank
J.L. Austin	A Plea for Excuses	1957	Proceedings of the Aristotelian Society	1149	192
J.L. Austin and P.F. Strawson	Symposium: Truth	1950	Proceedings of the Aristotelian Society	1042	1187
H.P. Grice and P.F. Strawson	In Defense of a Dogma	1956	The Philosophical Review	1659	908
H.P. Grice and Alan R. White	Symposium: The Causal Theory of Perception	1961	Proceedings of the Aristotelian Society	2970	955
Norman Malcolm	Defending Common Sense	1949	The Philosophical Review	691	210
Norman Malcolm	Philosophy for Philosophers	1951	The Philosophical Review	321	543
Gilbert Ryle	Systematically Misleading Expressions	1931	Proceedings of the Aristotelian Society	190	5698
Gilbert Ryle	Use, Usage and Meaning	1961	Proceedings of the Aristotelian Society	42	1379
P.F. Strawson	On Referring	1950	Mind	378	3061
John Wisdom	Philosophical Perplexity	1937	Proceedings of the Aristotelian Society	344	460

Table 2 Canonical ordinary language philosophy articles in Weatherson (2022)

(Soames, 2003). Articles are presented together with their ranking in Weatherson's topic 22 and 24.

If anything counts as practicing ordinary language philosophy or as critically discussing it, these articles do. Weatherson's models do a reasonably good job capturing these canonical articles, placing most of them in the top 3% of articles in one or both of topics 22 and 24. But finding relevant articles even in the top 1% of articles in a topic still requires a large amount of human effort—it means reading between 300 and 900 articles. The rankings of these canonical examples of ordinary language philosophy in topics 22 and 24 reveal that we will need to look beyond the top few hundred articles in each topic to get a survey of articles that are clearly examples of, or criticisms of, ordinary language philosophy.

But we also want to identify articles that fall outside the canon, because only then will we begin to get an accurate sense of the trajectory of articles in ordinary language philosophy that were published in the 20th and early twenty-first centuries. And looking systematically at the top articles in both Weatherson's category 22 and 24 is indeed an effective tool for reading, a way of stirring the archive to uncover some non-canonical works in ordinary language philosophy.

For example, consider the first article outside the top 10 in topic 22, C.H. Whiteley's "Mr. Warnock on Ordinary Language". This is not a canonical article on ordinary language philosophy by any measure—it has only been cited twice in 61 years.¹⁵ But it is an impressively concise (3 pages!) survey of problems with the methodology of ordinary language philosophy as it is standardly understood. It begins by quoting a passage from Warnock's *English Philosophy Since 1900*, which is a less cautious restatement of a more famous passage from Austin's "A Plea for Excuses", setting out one of the important assumptions behind the ordinary language method:

It [ordinary language] is to be used for a vast number of highly important purposes; and it is at the very least unlikely that it should contain either much more, or much less, than those purposes require. If so, the existence of a number of different ways of speaking is very likely indeed to be an indication that there is a number of different things to be said...Where the topic at issue really is one that does constantly concern most people in some practical way—as for example perception, the ascription of responsibility, or the assessment of human character and conduct—then it is certain that everyday language is as it is for some extremely good reasons; its verbal variety is certain to provide clues to important distinctions. (Warnock, 1958, p. 151)

Whiteley criticizes the assumption that the existence of a rich vocabulary describing some area of practical concern is evidence that there is an equally rich variety of different features to be described by that vocabulary; for example, a rich vocabulary can be due to historical linguistic influences or non-semantic considerations like sociolinguistic register or politeness. English, for instance, possesses both Romance and Germanic versions of many expressions, and the distinction marked between, e.g., "napkin" and "serviette" is not a matter of the objects being referred to but of register.

¹⁵ Citation counts are from Google Scholar, April 2021.

Austin's (1956) famous distinction between "mistake" and "accident" also identifies expressions on either side of this etymological divide.

Consider another non-canonical (5 citations in 59 years) example of ordinary language philosophy that turns up when looking at the top articles in Weatherson's topic 22: Philip P. Hallie's "The Privacy of Experience". This article begins with what we consider to be a perfectly generic statement of a project in ordinary language philosophy (in the sense of expressing features of the *genre*): it claims that (a) philosophers use a key expression ("private") differently from the ways it is ordinarily used, (b) confusions arise as a result of departing from ordinary use, and (c) those confusions can be resolved by pointing out the difference between philosophers' use and ordinary use:

Current controversies over the privacy of experience use the crucial term "private" in queer ways, in ways radically different from the ways it is used in plain talk. Words like "occult," "inner," "unverifiable" are assumed by the controversialists to be synonymous with that term; but as a matter of fact this synonymy does not hold in ordinary speech. In fact, the meaning of the term is being quietly but radically transformed when it is taken as synonymous with such words. What I should like to point out here is first of all the nature of this transformation, that is, the difference between privacy and what our controversialists are arguing about. Then I should like to show how confusions arise in the arguments when this difference is ignored. And finally, I should like to indicate how these confusions can be cleared up by our becoming aware both of this difference and of the everyday meaning of the word "private." (Hallie, 1961, p. 337)

This generic structure appears in other non-canonical articles in the Weatherson corpus, like A.N. Flew's "Selves" (1949)¹⁶:

I want to do two things: first, to draw attention to the oddness of the words which philosophers, apparently without any realisation of their peculiarity, habitually use in discussing problems about "selves"; and, second, to show the dangers of using such a perverse and perplexing vocabulary, and by doing this to hint that many of the difficulties of problems of "the self" might dissolve, if only philosophers would "express themselves in the clearest, plainest and most familiar manner, abstaining from all hard or unusual terms". (p. 355)

Discussions of ordinary language philosophy often include a disclaimer about it not being a philosophical "school" with doctrines shared among all its practitioners (see Dummett, 1978, p. 431, for example). When we identify an article as a work of (or criticism of) ordinary language philosophy, we are not claiming its membership in a philosophical "school", but rather identifying it as a member of a philosophical genre, within which individual variation takes place:

Think of a Western movie, or a musical, or a gangster film. Probably you won't think of any individual Western or musical or gangster film, but rather of a vaguely defined amalgam of actions and attitudes, of characters or locales. For as one sees more genre

¹⁶ Other highly generic ordinary language articles in Weatherson's corpus include: Adams (1958), Baier (1951, 1952), Cerf (1951), Henson (1967), Kaal (1963), Stroll (1956), and White (1960).

films, one tends to negotiate the genre less by its individual films than by its deep structure, those rules and conventions which render this film a Western and that film a musical. (Schatz, 1981, p. 18)

The shared structure that qualifies something as an example of ordinary language philosophy is a commitment to the idea that attention to the details of ordinary, non-philosophical use of language has substantial philosophical payoffs.

There are many more forgotten examples of ordinary language philosophy in the Weatherson corpus. Using topics 22 and 24 as tools for reading, we uncovered scores of noncanonical articles that start to fill out the standard story about the rise and fall of ordinary language philosophy. But even though we found many articles by reading through the lists for topics 22 and 24, the process was slow enough that we wanted to develop a more targeted method, one that could find examples of ordinary language philosophy by building on the resources of Weatherson's entire 90-topic model.

4 Hand coding ordinary language philosophy articles using a 90-topic similarity measure

As we saw with the cross-topic probabilities of topic 24, articles are assigned a probability of belonging to every topic, and although it is often useful to think of a given article as being in a single topic (whichever one the model considers maximally probable), in reality the picture is more complex. Weatherson makes this point in relation to the model's classification of an article on Kantian aesthetics:

Even for articles that you or I would say are unambiguously articles about Kant, the model is rarely more than 40% confident that that's what they are about. And this is for a good reason. Most articles about Kant in philosophy journals are, naturally enough, about Kantian philosophy. And any part of Kantian philosophy is, well, philosophy. So the model has a topic on Beauty, and when it sees an article on Kantian aesthetics, it gives some probability the correct classification of that article is in the topic on Beauty. (Sect. 1)

In other words, single topics may be useful for a summary view, but we can arrive at a more detailed understanding of a specific paper by looking at its distinctive mixture of all of the topics. We know, for example, that Ryle's "Use, Usage, and Meaning" (1961) is an article that concerns ordinary language philosophy. Articles similar to it seem likely to have something to do with ordinary language philosophy as well. We can check topic 24 to see which articles have the most similar scores to Ryle's, but this will only take us so far. In fact, the closest paper by that metric is Ernest Gellner's "Time And Theory In Social Anthropology" (1958). While Gellner was an acerbic critic of ordinary language philosophy, this article is a critique of the philosophical assumptions operative in E.R. Leach's *Political Systems of Highland Burma* (1954),

in particular Leach's belief that the precise concepts employed by anthropologists necessarily distort the messy social realities they are used to describe.¹⁷

The fact that the most similar article to Ryle's "Use, Usage, and Meaning" in topic 24 does not concern ordinary language philosophy is not surprising given what we know about the multivalence of topic 24. Yet even if topic 24 had a laser-like focus on a single philosophical issue, writing like Ryle does not just mean using the language of ordinary language philosophy exactly as much as he does. For instance, "Use, Usage, and Meaning" also has a fairly high score on topic 6 ("Definitions"), so any other philosopher who uses topic 6 language at a similar rate may come across as more Rylean (or at least, more similar to the "Usage" article) than a philosopher who does not. To be closest of all to Ryle, it would help to use both topics at a Rylean rate, even if neither is quite an exact match, in the same way that a point at (3,15) on an ordinary Cartesian plane will be closer to a point at (2,12) than it is to points at (3,0) or (100,15). This will hold true if we add another topic with a high score in this paper—say, topic 78 ("Concepts")—which is equivalent in our Cartesian example to adding a z-axis. And the most precise picture of proximity would take into account the score on every one of Weatherson's 90 topics.

In short, we can consider the probability of being assigned to each topic to be a dimension, treat our universe of papers as a 90-dimensional space, and calculate the distance between articles on that basis.¹⁸ It's impossible to picture a 90-dimensional space, but calculating distance within it is straightforward given the right tools.¹⁹ For example, the ten closest articles to "Use, Usage and Meaning" according to this method appear in Table 3.

This is a strikingly focused group of articles concerning the role of different understandings of linguistic "use" or "usage" as it bears on the practice of ordinary language philosophy.

In "Ordinary Language" (1953), Ryle spells out what his concern with "ordinary" language amounts to, namely the "standard" or "stock" uses of expressions, as opposed to "non-standard", "non-stock" uses of those expressions. He distinguishes between the "use" and the "usage" of an expression, where "use" is a normative notion that contrasts with *misuse*, while "a usage" is:

¹⁷ For Gellner's criticism of ordinary language philosophy, see Gellner (1959). Mehta (1963), Dummett (1978), Rée (1993), Uschanov (2001), and Krishnan (2023) discuss the brouhaha provoked by Gellner's book.

¹⁸ Though this paper has focused so far on analyzing individual topics, the arrangement of documents in a large corpus is arguably the more canonical use of topic models. Algee-Hewitt (forthcoming) gives an overview of the relevant literature, as well as a clear example of the method: he arranges nineteenth century United States novels by the posterior probabilities of 150 topics, finding clusters that seem to capture sea tales, mystery stories, college novels, and so on. For those who want to visualize the results of this kind of experiment, he includes a t-SNE graph, which depicts a version of the information in a two-dimensional plot (Algee-Hewitt forthcoming, Fig. 2).

¹⁹ We used the pdist function in the SciPy Python library and measured the Euclidean distance between articles. Cosine distance is often used in text mining contexts to even out disparities in scale (e.g., to measure the similarity of a common word and a rarely used word), but because every one of the papers in our corpus contains a value for every topic, all summing to a total probability of 1, we were not worried about these kinds of disparities. We therefore elected to use the simple Euclidean method.

Author	Title	Year	Journal	Distance
Gilbert Ryle	Ordinary Language	1953	The Philosophical Review	0.075
P.L. Heath	The Appeal To Ordinary Language	1952	The Philosophical Quarterly	0.094
P.L. Heath	Wittgenstein Investigated	1956	The Philosophical Quarterly	0.104
C.D. Rollins	Ordinary Language And Procrustean Beds	1951	Mind	0.110
A.D. Woozley	Ordinary Language And Common Sense	1953	Mind	0.112
Bertrand Russell	The Cult Of 'Common Usage'	1953	British Journal for the Philosophy of Science	0.117
O.P. Wood	The Force Of Linguistic Rules	1951	Proceedings of the Aristotelian Society	0.131
C.W.K. Mundle	"Private Language" And Wittgenstein's Kind Of Behaviourism	1966	The Philosophical Quarterly	0.137
C.G. New	A Plea For Linguistics	1966	Mind	0.141
D.M. Taylor	Meaning And The Use Of Words	1967	The Philosophical Quarterly	0.142

 Table 3 Most Similar Articles to Ryle, "Use, Usage, and Meaning", comparing probabilities of being assigned to all 90 topics in Weatherson (2022)

a custom, practice, fashion or vogue. It can be local or widespread, obsolete or current, rural or urban, vulgar or academic. There cannot be a misusage any more than there can be a miscustom or a misvogue. The methods of discovering linguistic usages are the methods of philologists (pp. 174–175).

(That is, philologists and not philosophers.)

In contrast, P.L. Heath's "The Appeal to Ordinary Language" (1952), which doesn't distinguish between "use" and "usage", criticizes some ordinary language philosophers' reliance on "standard" or "correct" usage on the grounds that expressions of ordinary language are frequently vague and ambiguous, and so attempting to identify a single, clear "standard" use is misguided: "For whatever usages be laid down as correct, it is nearly always possible to produce counter-examples of an unimpeachable ordinariness and legitimacy" (p. 7). Heath's "Wittgenstein Investigated" (1956) is a critical review of Wittgenstein's *Philosophical Investigations* that, among a long list of objections, argues that the expressions "use" and "meaning" are "highly ambiguous", which he argues leads to problems for Wittgenstein's famous claim in the *Philosophical Investigations* that "for a large class of cases...the meaning of a word is its use in the language [Sect. 43]" (p. 69).

Both C.D. Rollins's "Ordinary Language and Procrustean Beds" (1951) and A.D. Woozley's "Ordinary Language and Common Sense" are responses to Norman Malcolm's (1949) argument that when G.E. Moore (1939) offered a refutation of

skepticism by holding up each of his hands and then saying "I do know that I held up two hands above this desk not very long ago" (as an example of something that he knows), Moore was guilty of "a radical departure from ordinary and correct usage", a "misuse of language", and asserting something "without sense".

Bertrand Russell's "The Cult of 'Common Usage'" (1953) presents a caricature of ordinary language philosophy, as follows:

The doctrine, as I understand it, consists in maintaining that the language of daily life, with words used in their ordinary meanings, suffices for philosophy, which has no need of technical terms or of changes in the signification of common terms. (p. 303)

By way of criticism of this doctrine, Russell tells a "fable" involving a dialogue between an ordinary speaker (a "bedmaker"), who has observed a Professor going into a "dangerous frenzy" and being taken away in an ambulance:

[I]t happened that I, who live on the professor's staircase, overheard the following dialogue between the bedmaker and the policeman:

Policeman: 'Ere, I want a word with yer.

Bedmaker: What do you mean? 'A word'? I ain't done nothing.

Policeman: Ah, that's just it—Yer ought to 'ave done something. Couldn't yer see the pore gentleman was mental?

Bedmaker: That I could. For an 'ole hour 'e went on something chronic. But when they're mental you can't make them understand.

In this little dialogue, 'word', 'mean', 'mental', and 'chronic' are all used in accordance with common usage. They are not so used in the pages of *Mind* by those who pretend that common usage is what they believe in. What in fact they believe in is not common usage, as determined by mass observation, statistics, medians, standard deviations, and the rest of the apparatus. What they believe in is the usage of persons who have their amount of education, neither more nor less—less is illiteracy, more is pedantry—so we are given to understand. (p. 304)

O.P. Wood's little-known essay (2 citations in 70 years), "The Force of Linguistic Rules" (1951), maintains that questions about "what we would say" "or what we do say" are only philosophically interesting insofar as they are questions about "what is the correct use of the word", and not as contributions to a scientific theory of semantics (pp. 325–326). This claim seems to anticipate Ryle's distinction between "use" (standard or correct use) and "usage" (which is only of interest to philologists, not philosophers).

C.W.K. Mundle's "'Private Language' And Wittgenstein's Kind of Behaviourism" (1966) argues that Wittgenstein's private language argument conflates different senses of "private", and that Rush Rhees's (1954) defense of the private language argument against Ayer's criticisms ignores the way that expressions like "remembering that" and "doubting whether" are actually used in ordinary speech. According to Mundle, "Rhees

is denying facts about English usage because these are inconsistent with Wittgenstein's theory of meaning!" (p. 43).²⁰

C.G. New's "A Plea for Linguistics" (1966) criticizes J.L. Austin's armchair methods of collecting evidence of ordinary usage in "A Plea for Excuses" (1956) as being insufficiently empirically-informed and "frequently prescriptive" (p. 371), and advocates adopting the methods of corpus linguistics. The armchair method used by Austin only tells us "what we think we do with words" and not "what we actually do with them" (p. 375). New illustrates the limitations of the armchair method by pointing out that Austin's own use of the term "mistake" is not in accord with the account he gives of its meaning in "A Plea for Excuses" (p. 382).

Finally, D.M. Taylor's "Meaning and the Use of Words" (1967), which appears to have never been cited, attempts to specify a precise sense in which a word may be said to have a "use", and then describe conditions under which two words have the same "use" on the precisified sense of "use".

Given the impressive focus of these results, we used the 90-dimensional similarity scores to develop a dialectical approach to identifying more articles about ordinary language philosophy in Weatherson's corpus. From any one article like Ryle's, the similarity scores point toward as many as several dozen additional examples. These can then serve as the basis for additional similarity scores, which produce new examples, and so on.

We applied the 90-dimensional similarity measurement to Weatherson's corpus in the following iterated way: First, we took the list of canonical ordinary language philosophy articles (Table 2) and generated a list of the 50 most similar articles for each article in that list. Call those articles that appear in at least one of those top-50 most similar lists *prospective articles* (they may or may not actually be examples of ordinary language philosophy). Prospective articles could appear in multiple top 50 lists. For example, Judith Jarvis's "Notes On Strawson's Logic" (1961) was one of the 50 most similar articles to Ryle (1932), Austin et al. (1950), and Strawson (1950a, 1950b). We read the 105 prospective articles that appeared in at least two top 50 lists, tagging those that really were about ordinary language philosophy (examples of ordinary language philosophy or criticisms of it). This resulted in a list of 85 newly coded ordinary language philosophy articles. We then repeated this process, gathering all articles that appeared in at least two top-50 lists for our new, larger roster of tagged ordinary language philosophy articles. This produced a significantly longer list of prospective articles, since there were many more top-50 lists to be a part of. At the same time, the list contained more articles that we had already seen. By the third iteration of the process, we had 977 prospective articles, including 189 we had already tagged as "not ordinary language philosophy" and 255 we had already tagged as ordinary language philosophy.

This process could have gone on much longer, quickly reaching an intractable size for human tagging. We actually examined every paper we tagged, so dealing with 1,000 examples was already quite daunting. And with each iteration of the process of finding articles similar to those we had already tagged as ordinary language philosophy

²⁰ Mundle later published *A Critique of Linguistic Philosophy* (1970), in which he leveled the same criticism against other ordinary language philosophers, using "Professor J.L. Austin's methods" to criticize "jargon now being used by philosophers who regard Austin's writings as a model" (Section I).

we were reaching a more peripheral set of prospective articles—those similar to those similar to our original "canonical" list in our third iteration.

While our approach uncovered hundreds of examples of ordinary language philosophy, no list would be exhaustive in a non-controversial way, since the boundaries of "being an ordinary language philosophy paper" are vague, and expert human readers will disagree about whether to classify some articles as ordinary language philosophy. In the pursuit of what Pääkkönen and Ylikoski (2021, p. 1487) call "objectivity through transparency", we welcome debate about the appropriateness of our judgments to include any of the hundreds of papers that we identify as examples, discussions, or criticisms of ordinary language philosophy (see Appendix A for the full list).

Other methods might have achieved greater coverage at the cost of less certainty: Training a classifier on features beyond the topics might have enabled us to identify hundreds of articles automatically, with spot checking providing some sense of the accuracy. We preferred the certainty and familiarity our more qualitative approach affords. So, given the practical difficulty of going further and the achievement of our initial goal of finding many ordinary language philosophy articles, we stopped our search after three iterations of the similarity measurement. That process generated a

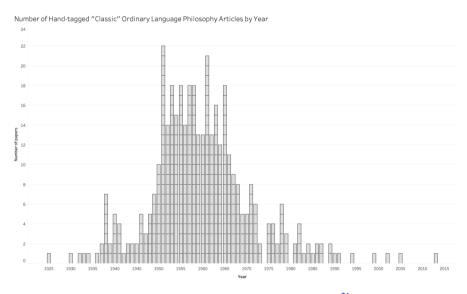
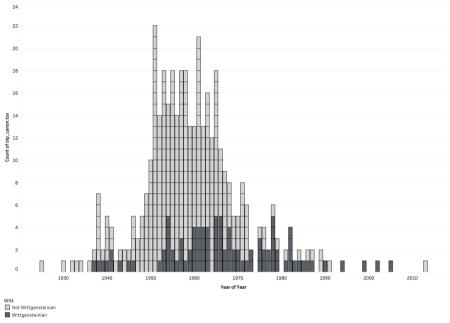


Fig. 3 Number of hand-coded ordinary language philosophy articles over time²¹

²¹We also examined the number of ordinary language philosophy articles as a percentage of all articles published, to control for the possibility that changes were driven by overall changes in the number of philosophy articles over time. Though the figures told a similar story (aside from somewhat less prominence for ordinary language philosophy in the 1960s compared to the 1950s), we decided to show the raw numbers on the theory that the existence of ordinary language articles is important for our purposes irrespective of the number of articles being published about other philosophical topics.



Number of Hand-tagged Ordinary Language Philosophy Articles by Year, Showing Articles About Wittgenstein

Fig. 4 Number of hand-coded papers about Wittgenstein, distinguished from non-Wittgensteinian ordinary language philosophy, over time

large, systematically produced, and hand-classified list of ordinary language philosophy papers that can help us understand the historical trajectory of ordinary language philosophy in Weatherson's corpus over time.

Combined with our earlier searches through the top articles in Weatherson's topics 22 and 24, this new method resulted in 402 total articles tagged as being about ordinary language philosophy. (See Appendix A for the full list.)

Plotting the hand-coded examples of ordinary language philosophy over time produces a chart that confirms the outline of the standard story: the number of ordinary language articles begins a steep climb after World War 2, is at its height from 1950 to 1965, and sharply drops off by the early 1970s (see Fig. 3).

We can also see in which journals most of the mid-century ordinary language articles appeared (see Table 4). Only two of the journals in Weatherson's corpus did not publish any articles we coded as ordinary language philosophy, namely *Philosophy* of Science and *Philosophy and Public Affairs*.

5 New wave ordinary language philosophy: epistemic contextualism and some experimental philosophy

One of the bigger debates that plays out among the ordinary language philosophy articles in Weatherson (2022) concerns Norman Malcolm's criticism of G.E. Moore's

Journal	Number of Articles Tagged as "Classic" ordinary language philosophy
Mind	94
Proceedings of the Aristotelian Society	92
Analysis	61
The Philosophical Quarterly	48
Philosophical Review	47
Journal of Philosophy	33
Philosophy and Phenomenological Research	20
Noûs	5
Ethics	1
British Journal for the Philosophy of Science	1

Table 4 Number of ordinary language articles appearing in different journals in Weatherson (2022)

"Defense of Common Sense" (1925) and "Proof of an External World" (1939), in which Malcolm claims that Moore's use of the word "know" is "a radical departure from ordinary usage" (Malcolm, 1949). Table 5, below, is the list of all articles tagged as ordinary language philosophy that concern Malcolm's criticism of Moore in Weatherson (2022), compiled in the course of hand-tagging examples of ordinary language philosophy discussed in the previous section:

One article that sticks out in this table is Allan Hazlett's 2009 paper "Knowledge and Conversation", which revisits the debate about Malcolm's criticism of Moore's use of "know". There is a gap of 44 years from the last article published on the debate in the 1960s and the publication of Hazlett's article. Hazlett uses Grice's (1975) theory of conversational implicature to criticize Malcolm's claims about the proper use of "know", but his article does not depart substantially from the issues discussed by the other articles in Table 5—it is clearly a paper engaged with central questions about the methodology of ordinary language philosophy and its relevance to debates about the nature of knowledge.

There is continuity in the underlying debate about the relation between the ordinary use of the word "know" and the nature of knowledge from the 1940s through the 2000s, but as Weatherson puts it, "It turns out that the language of twenty-first century philosophy is rather different from the language of twentieth-century philosophy" (Sect. 9.2), especially in the dramatically greater rate at which twenty-first century philosophers use expressions like "commitment", "claim", "account", "role", "challenge", and "relevant" in contrast with their mid-twentieth century counterparts (Sect. 9.3).²² The change in philosophical "buzzwords" makes it hard for Weatherson's model to identify an underlying continuity, because all it is tracking is the frequency with which words occur.

²² Weatherson jokes, "At this rate we'll soon see articles made up of just the words 'account', 'typically', 'relevant' and 'challenge', plus perhaps their plurals" (Sect. 9.3).

Author	Title	Year	Journal
Max Black	On Speaking with the Vulgar	1949	The Philosophical Review
C.A. Campbell	Common Sense Propositions and Philosophical Paradoxes	1944- 1945	Proceedings of the Aristotelian Society
James D. Carney	Malcolm and Moore's Rebuttals	1962	Mind
V.C. Chappell	Malcolm on Moore	1961	Mind
A.C. Ewing	Pseudo-Solutions	1956- 1957	Proceedings of the Aristotelian Society
Allan Hazlett	Knowledge and Conversation	2009	Philosophy and Phenomenological Research
Alistair M. Macleod	Moore's Proof	1965	Analysis
Norman Malcolm	Defending Common Sense	1949	The Philosophical Review
Norman Malcolm	Moore's Use of "Know"	1953	Mind
John O. Nelson	"I Know That Here Is a Hand"	1964	Analysis
D.J. O'Connor	Philosophy and Ordinary Language	1951	The Journal of Philosophy
Douglas Odegard	The Correct Use of a Sentence	1964	Analysis
C.D. Rollins	Ordinary Language and Procrustean Beds	1951	Mind
Morris Weitz	Philosophy and the Abuse of Language	1947	The Journal of Philosophy
Philip P. Wiener	Philosophical, Scientific, and Ordinary Language	1948	The Journal of Philosophy
A.D. Woozley	Ordinary Language and Common Sense	1953	Mind

Table 5 The debate over Malcolm's criticism of Moore's use of "know"

To properly verify the accuracy of the standard story of the rise and fall of ordinary language philosophy, we need to be able to identify those articles that continue ordinary language *debates* even when their language has changed from the middle of the twentieth century. Topics 22 and 24 won't help identify examples of "new wave" ordinary language philosophy. We need to focus on the arguments of these papers to uncover the status of ordinary language philosophy in the twenty-first century.

New wave ordinary language philosophy consists of two distinct projects that are continuous with classic ordinary language philosophy: a *constructive* project that uses facts about the way expressions are used outside philosophical debates as the foundation for conclusions about topics of philosophical interest, and a *critical* project that argues that philosophers are prone to fall into confusion or produce nonsense insofar as they depart from the way expressions are ordinarily used. The constructive project is a descendant of J.L. Austin's use of a "sharpened awareness of words' to 'sharpen our perception of...the phenomena" (Austin, 1956, p. 8), and the critical project takes its inspiration from classic claims like Wittgenstein's (1969, Sect. 10) that when one is sitting at a sick man's bedside, looking attentively into his face, neither the assertion "I

know that a sick man is lying here" nor the question "So I don't know, then, that there is a sick man lying here?" makes sense and Austin's (1962, p. 15) argument that the word "directly" has been 'stretched' by philosophers to the point that it has become "meaningless" (Hansen, 2014, p. 556).

Citing facts about the way ordinary speakers ascribe or deny knowledge using the word "know" as evidence for or against theories about the nature of knowledge is the paradigmatic example of the constructive project in contemporary ordinary language philosophy. For example, another Hazlett paper, "The Myth of Factive Verbs" (2010), is also explicitly concerned with ordinary language philosophy. It begins as follows:

At least since the days of 'ordinary language philosophy', epistemologists (some more than others) have been interested in knowledge attributions—the meaning or meanings of 'knows', the use or uses of sentences of the form 'S knows p', and so on. And there has more recently been renewed interest in how 'knows' is used. (Hazlett, 2010, p. 497)

Hazlett attributes the renewed interest in how the word "knows" is used to the rise of *epistemic contextualism*. Epistemic contextualism is the view that "knows" varies its extension in different contexts of use, so that someone can count as knowing that she has hands in ordinary contexts, and not count as knowing that she has hands when the standards for knowledge are raised, as they are in discussions of skeptical possibilities.²³ Epistemic contextualism involves both an explicitly linguistic thesis about the ordinary use of "knows", and an inference to the nature of knowledge on the basis of that ordinary use. The most influential article in the development of epistemic contextualism that appears in Weatherson's corpus is DeRose (1992), which begins by making observations about the way ordinary speakers would make knowledge ascriptions and knowledge denials, and argues that those facts both contribute to an explanation of the appeal of skeptical arguments and provide a foundation for a response to such arguments.

DeRose (2005) explicitly claims that his approach to epistemic contextualism is a form of ordinary language philosophy (p. 174) and he gives a particularly clear statement of how epistemic contextualism draws on ordinary language resources:

The best grounds for accepting contextualism concerning knowledge attributions come from how knowledge-attributing (and knowledge-denying) sentences are used in ordinary, non-philosophical talk: what ordinary speakers will count as 'knowledge' in some non-philosophical contexts they will deny is such in others. (DeRose, 2005, p. 172).

The rise of epistemic contextualism in the 1990s and 2000s and the challenges to its methodology based on observations about the way "know" is ordinarily used needs to be part of the story of ordinary language philosophy. The language in which the debate is conducted is different from mid-twentieth century debates, but the arguments are continuous with those classic debates.

One twenty-first century twist on traditional ordinary language methods is the use of formal experimental methods to survey ordinary use. These experimental approaches

²³ Weatherson (2022, Sect. 6) charts the trajectory of contextualism in epistemology.

to verifying ordinary use are based on the assumption that "Claims about 'what ordinary speakers will count as "knowledge" (DeRose, 2005, p. 72) are empirical claims, which can be tested" (Schaffer & Knobe, 2012, p. 4). Schaffer and Knobe (2012) discuss experimental surveys that seem to show that ordinary speakers make judgments about whether speakers "know" things that conflict with the claims about ordinary use made by epistemic contextualists. They conduct an experimental survey that they interpret as providing evidence in favor of their distinctive form of contextualism ("contrastivism"). Since the middle of the twentieth century, it has been disputed whether quantitative surveys of how speakers do in fact talk are the right way to study "ordinary use" (Cavell, 1958, 1965; Hansen, 2017; Longworth, 2018; Ryle, 1961; Sandis, 2021), but however those debates are resolved, the debates concern the proper methodology of ordinary language philosophy, and so they should be included in our counts of articles practicing or criticizing ordinary language philosophy.

Consider the debate surrounding "the Knobe Effect", in which ordinary speakers' judgements about whether side-effects of actions are done intentionally or not appear sensitive to their moral assessment of the side effects. Knobe (2003, p. 190) claims that what ordinary speakers are inclined to say about such cases is a good way (if not the only good way) of investigating how we think about intentional action:

Now, when we encounter a controversy like this one [about whether side effects can be brought about intentionally], it can sometimes be helpful to ask ourselves what people would ordinarily say about the situation under discussion. Would people ordinarily say that the side effects of a behaviour were brought about intentionally? Clearly, ordinary language does not here constitute a court of final appeal. (Even if it turns out that people ordinarily call side effects 'intentional', we might conclude that they are truly unintentional.) Still, it does seem plausible that the examination of ordinary language might provide us with some useful guidance about difficult cases like this one.

Familiar questions from old debates about ordinary language philosophy were immediately raised about Knobe's approach to investigating the concept of intentional action. For example, Adams and Steadman (2004) argue that Knobe hasn't identified facts about the "core concepts" of intentional action, but rather "pragmatic aspects of intentional language and its role in moral praise and blame". This is a standard response to ordinary language approaches to philosophical questions, usually attributed to Grice (1961, 1975), but which can be found in even earlier mid-twentieth century criticisms of ordinary language philosophy (Mates, 1958; Whiteley, 1959).

New wave debates in ordinary language philosophy differ from classic debates in that they are situated against the background of Gricean pragmatics or debates about the semantics-pragmatics interface highlighted by theories and criticisms of epistemic contextualism.²⁴ Jessica Brown's (2006) criticism of contextualist theories of knowledge, for example, argues that the facts about how ordinary speakers use "know" can be better explained using the Gricean maxim of relevance, instead of DeRose's preferred explanation in terms of the semantics of "know". All of the examples that we classify as new wave ordinary language philosophy engage with Grice's challenge to ordinary language philosophy, or with observational or experimental data about language use as it bears on philosophical questions.

The most direct and sustained engagement with Grice's arguments against ordinary language philosophy in Weatherson's corpus is Travis (1991), a critical review of Grice's *Studies in the Way of Words* (1989). Travis pushes back against Grice's criticisms of ordinary language philosophy by arguing that Grice's distinction between *what is said* and what is *implicated* by the use of a sentence relies on a notion of what is said by a sentence that both Austin and Wittgenstein criticize. Without Grice's stable notion of what is said, Travis argues that the distinction between saying and implicating breaks down, and with it Grice's main resource for criticizing ordinary language philosophy. Travis (1996) provides additional arguments for the idea that what is said by uses of a sentence isn't determined by the conventional meaning of the sentence, and Travis explicitly says that his arguments are inspired by Austin: "It would be fair to view this essay as no more than a working out of some ideas of J.L. Austin" (Travis, 1996, p. 451 n.1).

There are also examples of new wave versions of the more radical "critical" project of ordinary language philosophy (Hansen, 2014, 2020), which involves charging philosophers with speaking nonsense or saying things that are meaningless or failing to say anything at all as a result of straying too far from ordinary contexts of use. Kaplan (1991) argues that the notion of justification as it is standardly used in analytic epistemology floats so free of ordinary interests and constraints on answers that no meaningful account of such a "pure", "extraordinary" notion can be given. He describes the criticism of the "pure" view of justification as "Austinian/Wittgensteinian" (p. 153). And Kaplan (2000) responds to Barry Stroud's (1984) influential Grice-inspired criticism of ordinary language approaches to skeptical arguments by arguing that if radical skepticism does not require a radical transformation of our everyday practices it isn't something that we really understand—the standard skeptical attitude that aims to call into question all of our knowledge while leaving our ordinary epistemological practices untouched is not coherent (p. 302).

Avner Baz is the most persistent advocate of the critical project in new wave ordinary language philosophy. Baz (2012b), like Kaplan (1991), criticizes a central epistemological notion employed in analytic epistemology for being completely detached

²⁴ As we will see in the next section, there are articles that overlap temporally with new wave ordinary language philosophy—roughly the early 1990s to the present—but whose arguments take place primarily against the background of classic ordinary language philosophy (Hanfling 1991; McFee 1994; Reinhardt 2013). For example, Weatherson (2022, Sect. 2.2) characterizes Reinhardt (2013) as "a paradigm of Ordinary Language Philosophy". Consistent with that characterization, an obituary of Reinhardt's posted on the Australian Association of Philosophy's website states: "After completing his army service, stationed in Germany, he returned to the USA to study philosophy at Berkeley. While there, he studied with Stanley Cavell, Paul Grice and John Searle. Lloyd, like many others of that generation, does not hold a PhD in philosophy. But he went on to complete the prestigious BPhil at Oxford under Gilbert Ryle, during which time he came in regular contact with J.L. Austin as well." https://aap.org.au/blog/9039759.

from the kinds of interests that would guide its use in ordinary conversation. Baz argues that questions posed by philosophers about the meaning of "know that" are "*fundamentally* different from any question we might need to consider as part of our everyday employment of these expressions" (p. 91, emphasis in original). Insofar as the questions philosophers ask about "know that" lacks a connection to any of the ordinary purposes that one might have in asking whether someone knows something, we may be "tempted to think we understand" philosophers' questions when we in fact do not (p. 123).

The explicit advocacy of ordinary language philosophy methods in the new wave period licenses an investigation of new wave ordinary philosophy using the methods we developed for the more classic form. Still, though there are clear continuities between some examples of new wave and classic ordinary language philosophy, and some new wave ordinary language philosophers explicitly describe what they are doing as ordinary language philosophy, the presence of the new wave does not emerge directly out of our investigation of the classic era of ordinary language philosophy. There are some hints about the relation between classic and new wave ordinary language philosophy that emerge when we turn our attention to articles that are most similar to new wave articles, like the presence of Wisdom's classic ordinary language philosophy paper "Other Minds (VIII)" (1943), and Alan R. White's "On Claiming to Know" (1957) among the 50 most similar papers to Baz (2012). Like Baz (2012), both Wisdom (1943) and White (1957) concern the way we talk about knowledge. Wisdom's article takes the form of a dialogue between several characters, "White", "Gray", "Black", and "Brown", about whether skeptics who argue we can never really know anything are "altering, narrowing our actual use" of expressions like "know" (p. 298). (Black, in Wisdom's article, defends the view that the skeptic's use of "know" is an intelligible extension of more familiar uses of "know" against White and Gray's arguments.). A.R White (1957) is a discussion of the use of different sentences in which "know" figures, such as "I know", "He knows", "He says he knows", and "He would be correct in saying he knows".²⁵

The fact that some classic ordinary language papers show up in the most similar lists to new wave papers is suggestive, but ultimately our investigation of the new wave proceeded from observations about the continuity of arguments and method between classic and new wave ordinary language philosophy rather than from an application of our quantitative similarity measure to canonical classic ordinary language philosophy articles. Here again, our method depends quite substantially on qualitative domain expertise.

While there is no accepted canon of new wave ordinary language philosophy papers, we submit that the articles in Table 6 constitute the basis for an iterated similarity measurement of the kind we performed for canonical classic ordinary language philosophy papers in Sect. 4 above.

To identify examples of new wave ordinary language philosophy, we used a combination of manually identifying relevant examples and using an iterated application

²⁵ A.R. White is the most prolific example of a classic ordinary language philosopher in the Weatherson corpus, with 27 articles, including the second paper in the symposium on the "Causal Theory of Perception" in which Grice (1961) gives an early version of his theory of conversational implicature as part of a criticism of ordinary language arguments about the use of "looks"-talk.

Author	Title	Year	Journal
Avner Baz	Must Philosophers Rely on Intuitions?	2012	Journal of Philosophy
Jessica Brown	Experimental Philosophy, Contextualism, and SSI	2006	Philosophy and Phenomenological Research
Keith DeRose	Contextualism and Knowledge Attributions	1992	Philosophy and Phenomenological Research
Keith DeRose	The Ordinary Language Basis for Contextualism and the New Invariantism	2005	The Philosophical Quarterly
Allan Hazlett	Knowledge and Conversation	2009	Philosophy and Phenomenological Research
Allan Hazlett	The Myth of Factive Verbs	2010	Philosophy and Phenomenological Research
Mark Kaplan	Epistemology on Holiday	1991	Journal of Philosophy
Mark Kaplan	To What Must An Epistemology Be True?	2000	Philosophy and Phenomenological Research
Joshua Knobe	Intentional Action and Side-Effects in Ordinary Language	2003	Analysis
Jonathan Schaffer and Joshua Knobe	Contrastive Knowledge Surveyed	2012	Noûs
Charles Travis	Critical Notice: Annals of Analysis	1991	Mind
Charles Travis	Meaning's Role in Truth	1996	Mind

Table 6 Exemplars of new wave ordinary language philosophy or criticisms of new wave ordinary language philosophy

of the 90-dimensional measure of similarity discussed in the previous section. That is, using the similarity measurement, we found the top 50 most similar articles to each article in Table 6; we made a list of all articles that are on at least two such top-50 lists; we read those articles and identified the examples of new wave ordinary language philosophy [stage 1]; we then applied the similarity measurement to find the top 50 most similar papers to each paper identified as new wave ordinary language philosophy at stage 1; we made a list of all articles that were on at least two top-50 lists for the articles in Table 6 and the articles identified in stage 1; we read those new articles and identified the examples of new wave ordinary language philosophy [stage 2]; we repeated the process using all the articles identified as new wave in stages 1 and 2 to reach stage 3, where we stopped. (See Appendix B for the full list of examples of new wave ordinary language philosophy.)

When we add the "new wave" to the classical examples of ordinary language philosophy we identified in the Weatherson corpus, combining the results of our investigations into classic and new wave articles in one image, we get a picture of the history of ordinary language philosophy that defies the second half of the standard story of

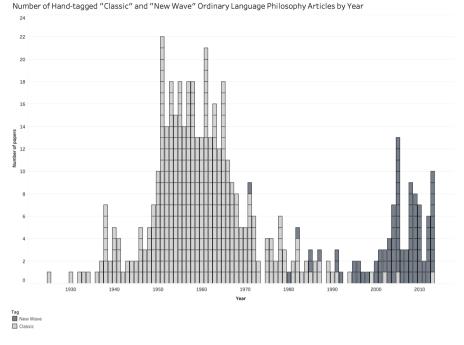


Fig. 5 Number of hand-coded "classic" and "new wave" ordinary language philosophy articles over time

its rise and fall (see Fig. 5). This new wave needs to be part of how we understand the history of ordinary language philosophy.

6 "Horseshoe Crab" and "Apple Newton" articles

6.1 "Horseshoe Crab" Articles

We classified a handful of articles that were published during the "new wave" period (roughly early 1990s through 2013, the end of the period covered by Weatherson's corpus) as "classic" ordinary language philosophy articles and *not* new wave ordinary language philosophy articles. These papers are "horseshoe crabs", living fossils whose language and argumentation have survived from an earlier era. For example, consider Graham McFee, "The Surface Grammar of Dreaming" (1994), which adopts the ordinary language approach used by Norman Malcolm in his investigation of dreaming (Malcolm, 1959), namely focusing on "dream reports"—the way we *talk* about our dreams. Explaining this approach, McFee writes:

This is one sense in which the topic here is the surface grammar of dreaming: that one should begin from what we say about dreams, being neither too mesmerised by this surface, nor totally ignoring it. In effect, what is required is an overview (übersicht) of our use of the word 'dreaming' (and its cognates), since our philosophical puzzlement derives from the lack of perspicuity in that use. (McFee, 1994, pp. 114–115).

Notice the similarity in McFee's description of his method to the "generic" statements of ordinary language methodology made by Hallie (1961) and Flew (1949) discussed in Sect. 3, above: philosophical problems arise from lack of clarity about the ordinary use of a key expression (in this case, "dreaming"); once we have a clear view of that ordinary use, philosophical puzzlement surrounding whatever the key expression picks out should dissolve. If you look hard enough, it is possible to find examples of paradigmatically classic mid-century style ordinary language philosophy still alive from the mid-1990s to the beginning of the twenty-first century.

6.2 "Apple Newton" Articles

There are some articles published during the classic period of ordinary language philosophy that we classified as new wave and not classic ordinary language philosophy. Like the Apple Newton personal digital assistant, these articles make technological advances that take a while to be widely adopted: they anticipate developments that will eventually constitute a new approach to ordinary language that draws on findings from a more systematic study of semantics and pragmatics than classic ordinary language philosophy.

For example, Peter Unger's "A Defense of Skepticism" (1971) argues for the conclusion that we don't know nearly anything that we purport to know, on the grounds that knowledge requires certainty, and that the ordinary meaning of the expression "certain" is what Unger calls an *absolute* expression. Absolute expressions are one type of scalar or gradable expression that apply to objects only when they have the highest degree of the property picked out by the relevant scale. Other examples of absolute scalar expressions are "flat" and "straight"; according to Unger, these terms only apply to objects that are absolutely, completely flat or straight. Absolute scalar expressions contrast with relative scalar expressions, which can apply to objects that only have the relevant property picked out by the scale to some contextually salient degree, and which do not have maximum degrees. Examples of relative scalar expressions include "tall" and "expensive"—nothing can be tall or expensive to an absolute degree, and what counts as tall or expensive can vary depending on the context. If "certain" is an absolute scalar expression, then being certain requires being *absolutely certain*, and we almost never achieve that degree of certainty; if knowledge requires certainty, then we almost never know anything.

Unger's distinction between absolute and relative scalar expressions was taken up and developed by linguists (Kennedy, 2007; Kennedy & McNally, 2005; Rusiecki, 1985), and deployed by philosophers in debates about the nature and plausibility of epistemic contextualism (Stanley, 2004, DeRose, 2005, Blome-Tillman, 2017). Unger's "A Defense of Skepticism" anticipates these new wave debates by more than 30 years.

7 Conclusions and generalizable methods

In this paper we have evaluated the standard story about the rise and fall of ordinary language philosophy by building on Weatherson's (2022) topic model of philosophy articles. We find quantitative evidence that supports the first part of the standard story, according to which ordinary language philosophy becomes popular in the 1940s, peaks between the early 1950s and the late 1960s, and then rapidly declines. But there is a "new wave" of ordinary language philosophy in the early twenty-first century, whose arguments are continuous with the arguments of classic ordinary language philosophy, that defies the second part of the standard story.

Our semi-automated method of identifying articles similar to a target article should also be useful in investigating topics beyond ordinary language philosophy. Measuring distance on the basis of a topic model yields intuitively illuminating responses to very specific requests, like "find articles similar to Ryle's 'Use, Usage, and Meaning'". In combination with our dialectical approach—the essential step in digital humanities studies of combining quantitative results with hermeneutics (i.e. reading the articles) and expertise in a humanities field (i.e. knowing something about a philosophical approach and its history)-this method should be generalizable to investigations of other fields. Future extensions of this work might build on it in two directions. First, more highly automated digital analysis might productively stir the archive further. More advanced classification or sorting (see note 4) could turn up articles that we did not see, perhaps taking advantage of our hand-tagging labor as part of the training for a more machine-learning-intensive approach. Second, our method as is could be extended to similar historical investigations, in philosophy or elsewhere. This would require a topic modeling process that is at least as good as Weatherson's, which is careful and well documented. But given such a model, it should work-when we have used this method to investigate other philosophical subfields, we have found results that seem as promising as those we found for ordinary language philosophy.²⁶ Readers can generate a similar list for any subfield of interest by selecting a few canonical articles and using a similar process of generating distance lists, tagging the results, generating new similarity lists from them, and so on.

Another product of our approach has been the assembly of a bibliography of ordinary language philosophy articles from the large corpus that Weatherson assembled. We have attached the lists of what we hand coded as "classic" and "new wave" ordinary language philosophy as online appendices.²⁷

We want to register one important caveat about our findings. The picture of the trajectory of ordinary language philosophy that we draw is as comprehensive as we could make it within the limits of Weatherson's corpus. But the journals that Weatherson has chosen to include in order to represent "what's generally happening in philosophy" at any given time involve various compromises, and some of the journals in which important work on ordinary language philosophy has been published (*Inquiry* for example) are not included in Weatherson's list of journals (Sect. 1.1). And our investigation

 $^{^{26}}$ We test our method on articles about the ontological argument in Appendix C.

²⁷ Appendix A: Hand-coded examples of "classic" ordinary language philosophy and criticisms of ordinary language philosophy in Weatherson (2022); Appendix B: Hand coded examples of "new wave" ordinary language philosophy and criticisms of ordinary language philosophy in Weatherson (2022).

doesn't include books, dissertations, syllabi, exam questions, conferences, talks, or any work not written in English.²⁸ But even with those limitations, we now have a much fuller and more detailed picture of the historical trajectory of ordinary language philosophy than has previously been available. Other researchers can begin to fill in the other parts of this picture that we have left blank.

In his discussion of how the topic of Idealism went from being "the dominant force in anglophone philosophy" in the late 19th and early twentieth centuries to simply no longer being a topic that was discussed in the journals included in his corpus, Weatherson cites the following passage from Wilfrid Sellars about the rise and fall of systems of philosophy (Sect. 2.2):

It has been said that a system of philosophy is not refuted, but becomes ignored. This is true. It is equally true (and for the same reason) that a clash of systems in the philosophical drama ends not in victory and defeat, but in a changing of the scene. Put from a somewhat different point of view, the historical development of philosophy is more truly conceived as the periodic formulation of new questions, than as a series of attempted answers to an enduring body of problems. To be sure, the new questions which appear in this process can be regarded, for the most part, as revisions or reformulations of earlier issues; however, the fact of revision and reformulation is of the essence of the matter, making new questions out of old. Put in these terms, a system dies when the questions it seeks to answer are no longer asked; and only where the questions are the same can there be a genuine clash of answers. (Sellars, 1948, p. 601)²⁹

Sellars's characterization fits ordinary language philosophy particularly well, especially since with the rise of new wave ordinary language philosophy in the early twenty-first century, some of the old questions posed by ordinary language philosophy are being asked again, but using the new language of contextualism and some types of experimental philosophy: how are expressions ordinarily used? Can ordinary use be identified by using experimental methods? What do facts about the way we ordinarily use expressions tell us about the semantics of those expressions, and about non-linguistic features of the world, like the nature of knowledge and intentional action?

Now that those questions are being asked again, we need to revise the standard story: ordinary language philosophy went into hibernation for 30 years but has returned in the twenty-first century, sometimes going by various aliases, most notably "contextualism" and some varieties of "experimental philosophy".

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²⁸ For a discussion of some of the domains not included in Weatherson's corpus that bear on measuring the rise and fall of ordinary language philosophy, see Forguson (2001) for exam questions, numbers of degrees in philosophy, and employment numbers of academic philosophers, Crary and de Lara (2019) for books, conferences, and articles outside Weatherson's corpus, and Bonino and Tripodi (2020) for dissertations and measurement of "academic success".

²⁹ See also Grant (1973, p. 157), who says, "It frequently happens that philosophical theories are not refuted or falsified, but simply fall out of use, out of fashion, become a bore."

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References

- Adams, E. M. (1958). On knowing that. The Philosophical Quarterly, 8(33), 300-306.
- Adams, F., & Steadman, A. (2004). Intentional action in ordinary language. Analysis, 64(2), 173–181.
- Algee-Hewitt, M. (forthcoming). Computing criticism: Humanities concepts and digital methods. In Jessica Marie Johnson, David Mimno, and Lauren Tilton (Eds.), *Debates in DH: Computational Humanities*. University of Minnesota Press.
- Austin, J. L. (1950). Truth. Proceedings of the Aristotelian Society, Supplementary, 24, 111–129.
- Austin, J.L. (1956–1957). A plea for excuses. Proceedings of the Aristotelian Society, 57, 1–30.
- Avramides, A. (2017). Wittgenstein and ordinary language philosophy. In H.-J. Glock & J. Hyman (Eds.), A Companion to Wittgenstein (pp. 718–730). Wiley-Blackwell.
- Baier, K. (1951). Decisions and descriptions. Mind, 60(238), 181-204.
- Baier, K. (1952). The ordinary use of words. Proceedings of the Aristotelian Society, 52, 47-70.
- Baz, A. (2012). Must philosophers rely on intuitions? Journal of Philosophy, 109(4), 316-337.
- Baz. (2012b). When words are called for: A defense of ordinary language philosophy. Harvard University Press
- Black, C. (1974). Philosophical investigations remark 43 revisited. Mind, 83(332), 596-598.
- Black, M. (1949). On speaking with the vulgar. Philosophical Review, 58(6), 616-621.
- Blome-Tillman, M. (2017). Gradability and knowledge. In J. Ichikawa (Ed.), The Routledge handbook of epistemic contextualism (pp. 348–357). Routledge.
- Bonino, G., Maffezioli, P., & Tripodi, P. (2021). Logic in analytic philosophy: A quantitative analysis. Synthese, 198(11), 10991–11028.
- Bonino, G., & Tripodi, P. (2020). Academic success in America: Analytic philosophy and the decline of Wittgenstein. British Journal of the History of Philosophy, 28(2), 359–392.
- Broadie, F. (1966). Trying and doing. Proceedings of the Aristotelian Society, 66, 27-40.
- Brown, J. (2010). Knowledge and assertion. Philosophy and Phenomenological Research, 81(3), 549-566.

Brueckner, A. (2005). Contextualism, Hawthorne's invariantism, and third-person cases. *The Philosophical Quarterly*, 55, 315–318.

- Campbell, C. A. (1944). Common sense propositions and philosophical paradoxes. Proceedings of the Aristotelian Society, 45, 1–25.
- Carney, J. D. (1962). Malcolm and Moore's Rebuttals. Mind, 71(283), 353-363.
- Cavell, S. (1958). Must we mean what we say? Inquiry, 1, 172–212.
- Cavell, S. (1962). The availability of Wittgenstein's later philosophy. *The Philosophical Review*, 71(1), 67–93.
- Cavell, S. (1964). Existentialism and analytical philosophy. Daedalus, 93(3), 946-974.

- Cavell, S. (1965). Austin at criticism. The Philosophical Review, 74(2), 204-219.
- Cerf, W. (1951). 'To know' and 'To Understand.' *Philosophy and Phenomenological Research*, 12(1), 83–94.
- Chapman, S. (2005). Paul Grice, philosopher and linguist. Palgrave MacMillan.
- Chappell, V. C. (1961). Malcolm on Moore. Mind, 70(279), 417-425.
- Crary, A., & de Lara, J. (2019). Introduction: Who's afraid of ordinary language philosophy? Graduate Faculty Philosophy Journal, 39(2), 317–339.
- Diamond, C. (2005). Logical syntax in Wittgenstein's Tractatus. The Philosophical Quarterly, 55(218), 78–89.
- Donagan, A. (1970). The encyclopedia of philosophy. The Philosophical Review, 79(1), 83-138.
- Dummett, M. (1978). Truth and other enigmas. Harvard University Press.
- Duncan-Jones, A. (1954). Further questions about 'Know' and 'Think'''. In M. Macdonald (Ed.), *Philosophy and analysis*. Blackwell.
- Ewing, A. C. (1965). Reply to first and second thoughts in moral philosophy. Mind, 74(296), 598.
- Ewing, A.C. (1956–1957). "Pseudo-solutions". Proceedings of the Aristotelian Society 57, 31–52.
- Fletcher, S. C., Knobe, J., & Wheeler, G. (2021). Changing use of formal methods in philosophy: Late 2000s vs. late 2010s. Synthese, 199, 14555–14576.
- Flew, A. G. N. (1949). Selves. Mind, 58(231), 355-358.
- Forguson, L. (2001). Oxford and the 'Epidemic' of ordinary language philosophy. *The Monist*, 84(3), 325–345.
- Gellner, E. (1958). Time and theory in social anthropology". Mind, 67(266), 182-202.
- Gellner, E. (1959). Words and things. Boston: Beacon Press.
- Grant, C. K. (1973). On a definition of knowledge. Proceedings of the Aristotelian Society, 73, 157-166.
- Gregory, J. C. (1952). Heterological and homological. Mind, 61(241), 85-88.
- Grice, H. P. (1961). The causal theory of perception. Proceedings of the Aristotelian Society, 35, 121–168.
- Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan (Eds.), Syntax and semantics (Vol. 3, pp. 41–58). Academic Press.
- Grice, H. P. (1986). Reply to Richards. In R. E. Grandy & R. Warner (Eds.), *Philosophical Grounds of Rationality: Intentions, Categories, Ends* (pp. 45–108). Clarendon Press.
- Grice, H. P., & Strawson, P. (1956). In defense of a dogma. The Philosophical Review, 65(2), 141-158.
- Hacker, P. M. S. (1996). Wittgenstein's place in Twentieth-century analytic philosophy. Blackwell.
- Hallie, P. (1961). The privacy of experience. The Journal of Philosophy, 58(13), 337-346.
- Hanfling, O. (1991). What is wrong with the paradigm case argument? Proceedings of the Aristotelian Society, 91, 21–38.
- Hansen, N. (2014). Contemporary ordinary language philosophy. Philosophy Compass, 9(8), 556–569.
- Hansen, N. (2017). Must we measure what we mean? Inquiry, 60(8), 785-815.
- Hansen, N. (2020). 'Nobody would really talk that way!': The critical project in contemporary ordinary language philosophy. Synthese, 197(6), 2433–2464.
- Hardie, C. D. (1936). The formal mode of speech. Analysis, 4(2/3), 46-48.
- Harris, D. W., & Unnsteinsson, E. (2018). Wittgenstein's influence on austin's philosophy of language. British Journal for the History of Philosophy, 26(2), 371–395.
- Hawthorne, J. (2002). Deeply contingent a priori knowledge. *Philosophy and Phenomenological Research*, 65(2), 247–269.
- Hazlett, A. (2009). Knowledge and conversation. Philosophy and Phenomenological Research, 78(3), 591–620.
- Hazlett, A. (2010). The myth of factive verbs. Philosophy and Phenomenological Research, 80(3), 497-522.
- Heath, P. L. (1952). The appeal to ordinary language. The Philosophical Quarterly, 2(6), 1–12.
- Heath, P. L. (1956). Wittgenstein investigated. The Philosophical Quarterly, 6(22), 66-71.
- Henson, R. G. (1967). Ordinary language, common sense, and the time-lag argument. Mind, 76(301), 21-33.
- Horn, L. R. (2001). A Natural history of negation. CSLI Publications.
- Hu, Y., Boyd-Graber, J., Satinoff, B., & Smith, A. (2014). Interactive topic modeling. *Machine Learning*, 95(3), 423–469.
- Hughes, G. E. (1979). Report on analysis "Problem" No. 17. Analysis, 39(3), 113-115.
- Hunter, J. F. M. (1978). A Scholar's Wittgenstein. The Philosophical Review, 87(2), 259-274.
- Kaal, H. (1963). Senses of 'Perceive' or senses of 'Senses of "Perceive'"? Analysis, 24(1), 6-11.
- Kaplan, M. (1991). Epistemology on holiday. Journal of Philosophy, 88(3), 132-154.

Kaplan, M. (2000). To what must an epistemology be true? *Philosophy and Phenomenological Research*, 61(2), 279–304.

- Kennedy, C., & McNally, L. (2005). Scale structure and the semantic Typology of gradable predicates. Language, 81(2), 345–381.
- Knobe, J. (2003). Intentional action and side effects in ordinary language. Analysis, 63(3), 190-194.
- Krishnan, N. (2023). A terribly serious adventure: Philosophy at Oxford 1900-1960. Profile.
- Lafleur, L. (1942). The R-Being. Philosophy of Science, 9(1), 37-39.
- Leach, E. R. (1954). Political systems in highland Burma: A study of Kachin social structure. Bell.
- Linsky, L. (1957). Wittgenstein on language and some problems of philosophy. *The Journal of Philosophy*, 54(10), 285–293.
- Longworth, G. (2018). The ordinary and the experimental: Cook Wilson and Austin on method in philosophy. British Journal for the History of Philosophy, 26(5), 939–960.
- Macleod, A. M. (1965). Moore's proof. Analysis, 25(4), 154-160.
- Malaterre, C., Chartier, J.-F., & Pulizzotto, D. (2019). What is this thing called *philosophy of science*? A computational topic-modeling perspective, 1934–2015. HOPOS: The Journal of the International Society for the History of Philosophy of Science, 9, 1–35.
- Malaterre, C., Lereau, F., Pulizzotto, D., & St-Onge, J. (2021). Eight journals over eight decades: A computational topic-modeling approach to contemporary philosophy of science. *Synthese*, 199, 2883–2923.
- Malaterre, C., Pulizzotto, D., & Lareau, F. (2020). Revisiting three decades of *biology and philosophy*: A computational topic-modeling perspective. *Biology & Philosophy*, 35(5), 1–25.
- Malcolm, N. (1949). Defending common sense. The Philosophical Review, 58(3), 201-220.
- Malcolm, N. (1951). Philosophy for philosophers. The Philosophical Review, 60(3), 329-340.
- Malcolm, N. (1953). Moore's use of "Know." Mind, 62(246), 241-247.
- Malcolm, N. (1959). Dreaming. Routledge.
- Mandelbaum, M. (1968). Language and chess: De Saussure's analogy. *The Philosophical Review*, 77(3), 356–357.
- Markosian, N. (1997). The paradox of the question. Analysis, 57(2), 95-97.
- Mates, B. (1958). On the verification of statements about ordinary language. *Inquiry*, 1(1), 161–171.
- McFee, G. (1994). The surface grammar of dreaming. Proceedings of the Aristotelian Society, 94, 95–115.
- Mehta, V. (1962). Fly and the fly-bottle: Encounters with British intellectuals. Little, Brown and Company.
- Mohr, J. W., Bail, C. A., Frye, M., Lena, J. C., Lizardo, O., McDonnell, T. E., Mische, A., Tavory, I., & Wherry, F. F. (2020). *Measuring culture*. Columbia University Press.
- Moore, G. E. (1925). A defense of common sense. In J. Muirhead (Ed.), *Contemporary British Philosophy*. London: George Allen and Unwin Ltd.
- Moore, G. E. (1939). Proof of an external world. H. Milford.
- Mulhall, S. (1994). Review of Johnston, Peterman, Ryle, and Wright. *Philosophical Investigations*, 17(2), 444–456.
- Mulhall, S. (2017). Wittgenstein and continental philosophy. In H.-J. Glock & J. Hyman (Eds.), A Companion to Wittgenstein (pp. 757–770). Wiley-Blackwell.
- Mundle, C. W. K. (1966). 'Private language' and Wittgenstein's kind of behaviourism. The Philosophical Quarterly, 16(62), 35–46.
- Mundle, C. W. K. (1970). A critique of linguistic philosophy. Oxford University Press.
- Nelson, J. O. (1964). 'I know that here is a hand'. Analysis, 24(6), 185–190.
- New, C. G. (1966). A plea for linguistics. Mind, 75(299), 368-384.
- O'Connor, D. J. (1951). Philosophy and ordinary language. The Journal of Philosophy, 48(26), 797-808.
- Odegard, D. (1964). The correct use of a sentence. Analysis, 24(3), 63-67.
- Pääkkönen, J., & Ylikoski, P. (2021). Humanistic interpretation and machine learning. Synthese, 199, 1461–1497.
- Parker-Ryan, S. (2012). Ordinary language philosophy. In Internet Encyclopedia of Philosophy. http://www. iep.utm.edu/ord-lang/.
- Rée, J. (1993). English philosophy in the fifties. Radical Philosophy, 65, 3-21.
- Reinhardt, L. (2013). Reality deflated and minimized. Analysis, 73(2), 279-283.
- Rollins, C. D. (1951). Ordinary language and procrustean beds. *Mind*, 60(238), 223–232.
- Rusiecki, J. (1985). On adjectives and comparison in English. Longman Linguistics Library.
- Russell, B. (1953). The cult of 'Common Usage". *The British Journal for the Philosophy of Science*, 3(12), 303–308.

Kennedy, C. (2007). Vagueness and grammar. Linguistics and Philosophy, 30, 1-45.

- Ryle, G. (1931). Systematically misleading expressions. *Proceedings of the Aristotelian Society*, 32, 139–170.
- Ryle, G. (1949). The concept of mind. Barnes and Noble.
- Ryle, G. (1953). Ordinary language. The Philosophical Review, 62(2), 167-186.
- Ryle, G. (1961). Use, usage and meaning. Proceedings of the Aristotelian Society, Supplementary Volumes, 35, 223–242.
- Sandis, C. (2021). No picnic: Cavell on rule-descriptions. Philosophical Investigations, 44(3), 1-26.
- Schaffer, J., & Knobe, J. (2012). Contrastive knowledge surveyed. Noûs, 46(4), 675-708.
- Schatz, T. (1981). Hollywood genres: Formulas, filmmaking, and the studio system. Random House.
- Sellars, W. (1948). Realism and the new way of words. *Philosophy and Phenomenological Research*, 8(4), 601–634.
- Sider, T. (1997). On the paradox of the question. Analysis, 57(2), 97-101.
- Soames, S. (2003). Philosophical analysis in the twentieth century (Vol. II). Princeton University Press.
- Stanley, J. (2004). On the linguistic basis for contextualism. Philosophical Studies, 119(1-2), 119-146.
- Stanley, J. (2008). Philosophy of language. In D. Moran (Ed.), *The Routledge companion to twentieth century philosophy*. New York: Routledge.
- Storer, T. (1962). Miniac: World's smallest electronic brain. Analysis, 22(6), 151-152.
- Strawson, P.F. (1950b). "Truth". Proceedings of the Aristotelian Society 129-172(24).
- Strawson, P. F. (1950a). On referring. Mind, 59(235), 320-344.
- Stroll, A. (1956). On 'The.' Philosophy and Phenomenological Research, 16(4), 496-504.
- Taylor, D. M. (1967). Meaning and the use of words. The Philosophical Quarterly, 17(66), 25–37.
- Thompson, M. (1961). When is ordinary language reformed? Journal of Philosophy, 58(18), 498-504.
- Travis, C. (1985). On What is strictly speaking true. Canadian Journal of Philosophy, 15(2), 187-229.
- Travis, C. (1991). Annals of analysis. Mind, 100(398), 237-264.
- Unger, P. (1971). A defense of skepticism. The Philosophical Review, 80(2), 198-219.
- Urmson, J. O. (1965). J.L. Austin. The Journal of Philosophy, 62(19), 499-508.
- Uschanov, T.P. (2001). The strange death of ordinary language philosophy. https://www.mv.helsinki.fi/ home/tuschano/writings/strange/.
- Warnock, G. (1958). English philosophy Since 1900. Oxford University Press.
- Warnock, G. (1998). Ordinary language philosophy, school of". In E. Craig (Ed.), Routledge encyclopedia of philosophy. London: Routledge.
- Weatherson, B. (2022). A History of Philosophy Journals, Volume 1: Evidence from Topic Modeling, 1876–2013. Michigan: Maize Books. http://www-personal.umich.edu/~weath/lda
- Weber, M. (1958). Science as a vocation. Daedalus, 87(1), 111-134.
- Weitz, M. (1947). Philosophy and the abuse of Language. The Journal of Philosophy, 44(20), 533-546.
- White, A. R. (1956). The use of sentences. Analysis, 17(1), 1-4.
- White, A. R. (1957). On claiming to know. The Philosophical Review, 66(2), 180-192.
- White, A. R. (1960). Inclination. Analysis, 21(2), 40-42.
- Whiteley, C. H. (1959). Mr. Warnock on ordinary language. Mind, 68(271), 396-398.
- Wiener, P. P. (1948). Philosophical, scientific, and ordinary language. *The Journal of Philosophy*, 45(10), 260–267.
- Williams, G. (1949). The individual aspects of ethics—A reply to Professor Garnett. The Journal of Philosophy, 46(15), 472–477.
- Wisdom, J. (1943). Other minds (VIII.). Mind, 52(108), 289-313.
- Wisdom, J. (1961). The inaugural address: A feature of Wittgenstein's technique. Proceedings of the Aristotelian Society, Supplementary Volumes, 35, 1–14.
- Wisdom, J. (1936–1937). Philosophical perplexity. Proceedings of the Aristotelian Society 37, 71–88.
- Wood, O. P. (1950). The force of linguistic rules. Proceedings of the Aristotelian Society, 51, 313–328.
- Woozley, A. D. (1953a). Knowing and not knowing. Proceedings of the Aristotelian Society, 53, 151–172.
- Woozley, A. D. (1953b). Ordinary language and common sense. Mind, 62(247), 301-312.
- von Wright, G. H. (1993). Analytic philosophy. A historico-critical survey. In *The tree of knowledge and other essays* (pp. 25–52). Leiden: Brill.

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