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## Two Quantitative Researches in the History of Philosophy

Some Down-to-Earth and Haphazard Methodological Reflections

by

Guido Bonino, Paolo Maffezioli, Paolo Tripodi



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### Section 1: Editorials

1. *Editorial* (JlHI)

### Section 2: Articles

2. *Rendering Sociology. On the Utopian Positivism of Harriet Martineau and the 'Mumbo Jumbo club'* (M. Wilson)
3. *Individualism and Social Change. An Unexpected Theoretical Dilemma in Marxian Analysis* (V. Gioia)

### Section 3: Notes

4. *Introduction to the Open Peer-Reviewed Section on DR2 Methodology Examples* (G. Bonino, E. Pasini, P. Tripodi)
5. *Exploring Knowledge Dynamics in the Humanities. Two Science Mapping Experiments* (E. Petrovich, E. Tolusso)
6. *Reading Wittgenstein Between the Texts* (M. Santoro, M. Airoidi, E. Riviera)
7. *Two Quantitative Researches in the History of Philosophy. Some Down-to-Earth and Haphazard Methodological Reflections* (G. Bonino, P. Maffezioli, P. Tripodi)

### Section 4: Reviews

8. *Book Reviews* (L. Delaini)
- .....

# Two Quantitative Researches in the History of Philosophy

## Some Down-to-Earth and Haphazard Methodological Reflections

Guido Bonino, Paolo Maffezoli, Paolo Tripodi \*

*In this paper we are going to put forth some methodological reflections on two different investigations we conducted in the context of the DR2 research group. Such investigations were our first serious attempts at applying distant reading techniques and more in general quantitative methods to the history of philosophy. Our reflections are rather down-to-earth, and they have their roots in the context of the actual research activity, with its practical difficulties, stratagems and questions left unanswered. In this sense they do not concern lofty questions of principle, to be established a priori and with a normative attitude. A sketchy preliminary presentation of the two researches is in order as a basis for the methodological remarks.*

### 1. Wittgenstein and Academic Success

The first investigation concerns the place of Wittgenstein in contemporary analytic philosophy (Bonino and Tripodi 2019). Of course, this topic has already been widely investigated by means of the traditional methods of the history of philosophy. A rather convincing historical reconstruction is shared by most scholars. In the 1950s and '60s, Wittgenstein—the later Wittgenstein—was considered the leading figure of the two main centers of analytic philosophy,

\* University of Turin ([guido.bonino@unito.it](mailto:guido.bonino@unito.it)); Universitat de Barcelona ([paolo.maffezoli@ub.edu](mailto:paolo.maffezoli@ub.edu)); University of Turin ([paolo.tripodi@unito.it](mailto:paolo.tripodi@unito.it)).

namely Oxford and Cambridge (though the latter to a lesser extent). The success of the Wittgensteinian paradigm during those years led many people to suppose that such a paradigm would have a similar impact on the U.S. as well. For various reasons (philosophical, cultural and even geopolitical), the philosophy of Wittgenstein did not quite live up to those expectations. Let us just say that the Wittgensteinian tradition lost its centrality in Britain and never reached a corresponding reputation in the U.S.

That is roughly the story that many philosophers accept and that is told by historians of philosophy. The aim of our work was to check whether a quantitative approach to the history of philosophy can add some interesting details and new insights to the historical-philosophical understanding of the decline of the Wittgensteinian tradition in contemporary analytic philosophy.

It is important to realize that, notwithstanding the supposed decline, Wittgenstein has always remained a very important philosopher throughout the whole period under consideration, and that he has always been a very popular subject matter of Ph.D. philosophy dissertations in the U.S.

Philosopher	Occurrences
Heidegger	499
Wittgenstein	321
Dewey	302
Whitehead	247
Husserl	227
Peirce	184
Sartre	167
James	157

Table 1. 20<sup>th</sup>-century philosophers in dissertation titles (1901-2015).

Philosopher	Occurrences
Heidegger	2779
Wittgenstein	1376
Dewey	1241
Husserl	1059
Derrida	846
Foucault	842
Sartre	726
Peirce	718

Table 2. 20<sup>th</sup>-century philosophers in the abstracts (1981-2010).

We thought that one aspect of the supposed decline of Wittgenstein in the history of analytic philosophy could be investigated by analyzing the academic careers (if any) of those who wrote their dissertation on Wittgenstein, and by comparing them with the careers of those who wrote their dissertation on a 'typical' analytic philosopher. We chose four analytic philosophers, who hold

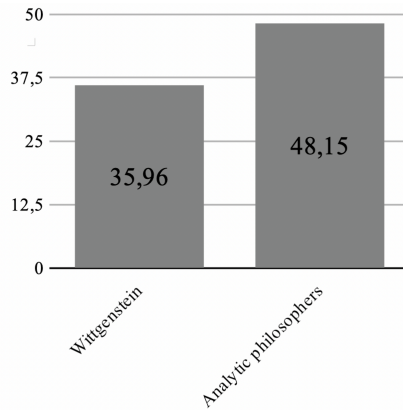


Fig. 1. Analytic philosophers: +35%

very different views on virtually every subject, but who are almost unanimously regarded as important figures within the analytic community. They are David Lewis, Saul Kripke, Michael Dummett and Jerry Fodor.

The first step was that of selecting the philosophy dissertations defended from 1981 to 2010. Then we selected those dissertations in which the name ‘Wittgenstein’ occurs in the abstract. We got 329 dissertations. The same was done with the ‘analytic’ dissertations (we got 404 of them). Then we traced the academic careers (if any) of all the authors of dissertations that had been selected. We attributed a numerical value (which we call the ‘Academic Success Index’) to the highest position each of them held (if any). We considered both the academic rank (adjunct, assistant, associate, full professor) and the ranking of the philosophy department (such rough three-levels ranking is drawn from existing rankings).

Figure 1 shows the comparison between the average academic success index of the authors of Wittgensteinian and analytic dissertations respectively. As one can see, there is a significant difference between the two groups. The Wittgensteinian ‘decline’ seems to be in some way confirmed. The relatively low Academic Success Index is a manifestation of such a decline.

The Academic Success Index should not be taken as an absolute value, if only

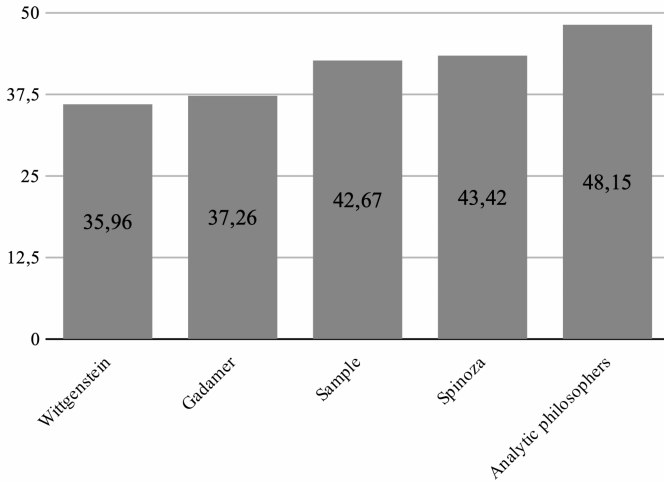


Fig. 2. Academic Success Index of Wittgenstein compared with other groups.

for the fact it is calculated by weighing different factors in a rather arbitrary way. It is, however, a significant indicator of the relative success of an author *vis-à-vis* another. Moreover, a further indication of its reliability is provided by comparative evaluations of other groups of dissertations. More or less the same results can be obtained whether you consider the whole period 1981-2010 or the disaggregated data for five-year periods, whether you focus on strictly Wittgensteinian theses or you take into account also those in which Wittgenstein is a minor topic, whether you normalize the Academic Success Index for academic age or not, etc.; moreover the Academic Success Index of Wittgenstein is low not only with respect to typical analytic philosophers, but also with respect to some other groups of dissertations we chose as control groups: Gadamer, Spinoza and a random sample of the dissertations.

Of course, correlation does not entail causation and we cannot conclude that the relatively unsuccessful careers of those who wrote their dissertations on Wittgenstein *causally* depends on the choice of the topic. We tried in our work to show, by means of different comparisons of data, that the choice of the subject

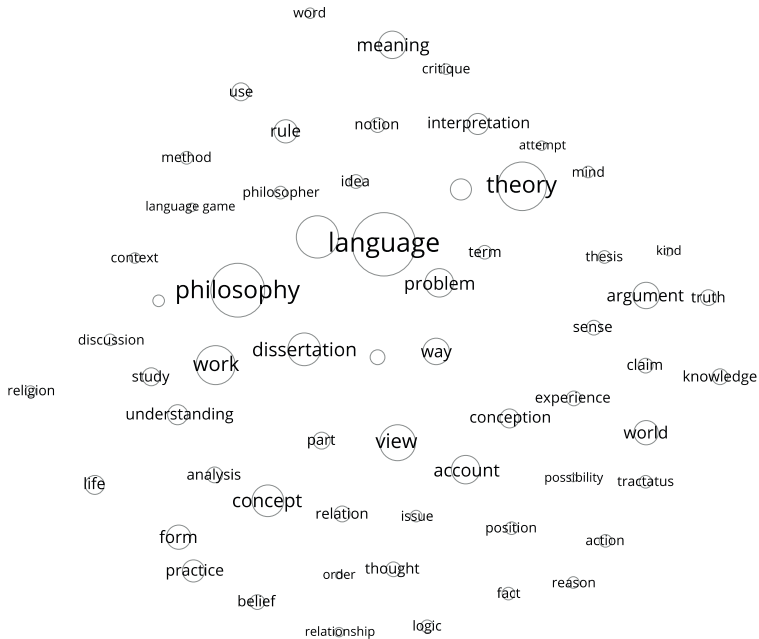


Fig. 3. Wittgenstein.

matter is at least a genuine cause, among others, of the difference in academic success.

But *why*, and *how*, does a philosophical topic make a difference for academic success? Using a visualization software, we found this.

These maps have been obtained by retrieving and counting the occurrences of terms in the abstracts of the theses. The size of an item's label and circle depend on the number of occurrences of the term.

Looking at the analytic map, we found a pattern that we did not recognize in the Wittgensteinian one. The keywords on the map suggest the idea that philosophy is a kind of *theory*—THEORY is the biggest circle—which defends *arguments*, provides *accounts* and put forth *claims*, in order to solve *problems*.

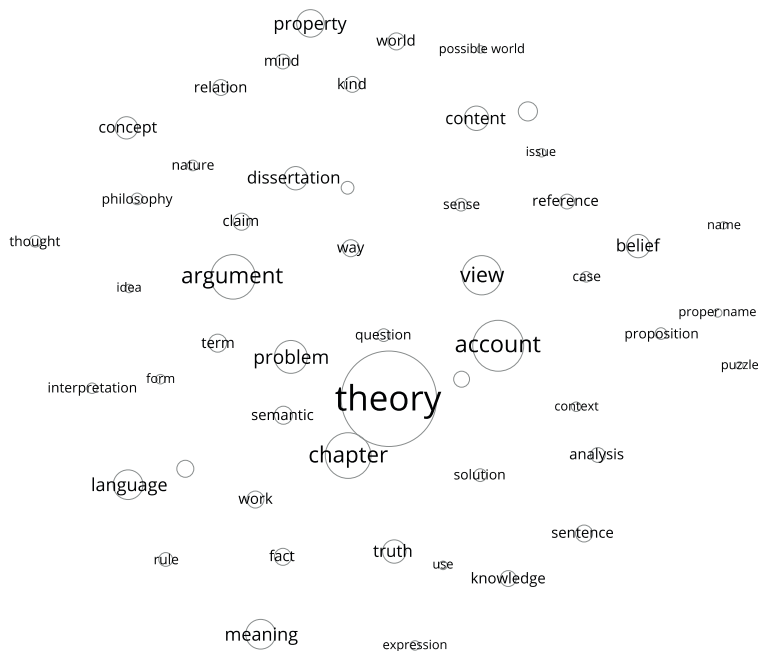


Fig. 4. Analytic philosophy.

This pattern on the analytic map—in which theory, argument, problem, account, claim are all important keywords—hints at a science-oriented style and metaphilosophical view.

To sum up the present results: it seemed to us that the difference of academic success may be (partly) explained by the presence (and the absence) of certain semantic patterns; such patterns, in turn, point to the presence (and the absence) of a science-oriented philosophical style and metaphilosophy. Therefore, this is perhaps our main thesis: the index of academic success for Ph.D. candidates in U.S. philosophy departments in the last forty years is quite strictly connected to the choice of a more or less science-oriented philosophical style and metaphilosophy.



Did our quantitative research add anything original to the picture of the decline of Wittgenstein provided by historians of philosophy by means of traditional methods? We think so. We have retrieved, measured, read and interpreted a relatively large amount of data, and by examining the data we have pointed out the metaphoric place where the decline of Wittgenstein began.

In particular, we have discovered that the decline of Wittgenstein took place at the level of academic recruitment. Our results suggest that such a decline did not depend, so to speak, on a shift in the *Zeitgeist*. It was not due to a bottom-up dismissal of the interest in Wittgenstein's philosophy because Wittgenstein was a philosopher swimming against the tide of history. On the contrary, it seems to be the result of a top-down process guided by a relatively small number of people, i.e. those academics who held the power of influencing the recruitment policies in the philosophy departments.



## 2. Logic in analytic philosophy

The aim of our second work was that of substantiating with data the widely shared view according to which logic is central in analytic philosophy. The corpus taken into consideration comprises all the articles published in five important philosophical journals (*The Journal of Philosophy*, *Mind*, *The Philosophical Review*, *The Proceedings of the Aristotelian Society* and *Philosophy and Phenomenological Research*) in the time span 1941-2010.

To give a concise anticipatory overview, we provided some results concerning the overall presence of logic in these articles, the relative technical sophistication of the logic used for philosophical purposes, the kind of use that is made of logic (i.e., subject matter vs. instrumental). Our guiding questions were: What are the relations between analytic philosophy and logic? What is the role of logic in analytic philosophy? Would one need logic to do analytic philosophy?

Distant reading and, more generally, quantitative methods allowed us to find more interesting and reliable answers to these questions.

By distantly or—as Moretti once said (2013, 44)—serially reading all the articles in which logic is in some way present, for each paper we raised the following two questions. Q<sub>1</sub>: What does this paper use logic for? Q<sub>2</sub>: What level of logical competence does this paper require? In answering Q<sub>1</sub>, we distinguished an instrumental and a non-instrumental role of logic in philosophy. By non-instrumental uses we mean either doing logic properly understood (= giving proofs, demonstrating theorems, and so forth) or dealing with logic as a subject matter of philosophy (= investigating the philosophy of logic). Instrumental uses are those that can be found in articles in which the role of logic is that of providing an instrument for philosophy: logic as an instrument for doing moral philosophy, metaphysics, epistemology, and so forth. A third category (‘Other’) includes history of logic and inductive logic.

Logic as an instrument increases over time, logic as a discipline does not: philosophy of logic decreases and logic proper remains more or less constant (with negligible numbers). The common opinion seems to be confirmed by data, but it does not tell the whole story.

Even with respect to Q<sub>2</sub>, we wanted to find an answer as precise and complete as possible. In order to get to such an answer, we proposed a method to measure the level of ‘logical sophistication’, from logical preliminaries to Gödel’s incompleteness theorem, so to speak. Very succinctly, we identified eleven topics and we have assigned a level of sophistication from 1 to 4 to each of them.

- Preliminaries: 1
- Propositional logic: 2
- Propositional modal logic: 3
- Non-classical propositional logics: 3
- First-order logic: 3
- Peano arithmetic: 4
- Proof theory: 4
- Second-order logic: 4
- Model theory: 4
- Set theory: 4
- First-order modal logic: 4

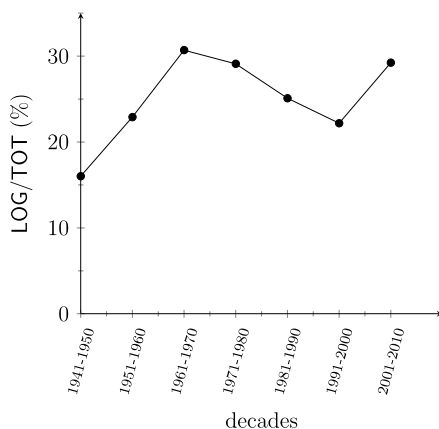


Fig. 5. How much logic? Percentage of analytic philosophy articles in which logic is present in some way.

Notice there is also a level 0: no competence of logic at all. Then for each article we wondered: How much logic would you need to have a fair grasp of the article itself? Figure 7 is a summary of the results.

Level 0 (no logical competence at all) disappears in the 60s. Level 1 is largely the most significant (55.77%). Level 2 and 3 increase until the 70s and then decrease moderately. Level 4 also increases, but only in the last decade.

Thus, how much logic is present in analytic philosophy? Approximately 25% of all the articles in the corpus. What use of logic is made in analytic philosophy? Logic is mainly instrumental. What is the level of logical sophistication in analytic philosophy? The average level of difficulty does not go beyond preliminaries. How should these results be interpreted? Do they confirm the centrality of logic in analytic philosophy? Are they in some way unexpected? These are difficult questions, and they certainly require serious reflection. Yet it seems to us that also in this case distant reading has provided at least the raw material for such reflections.

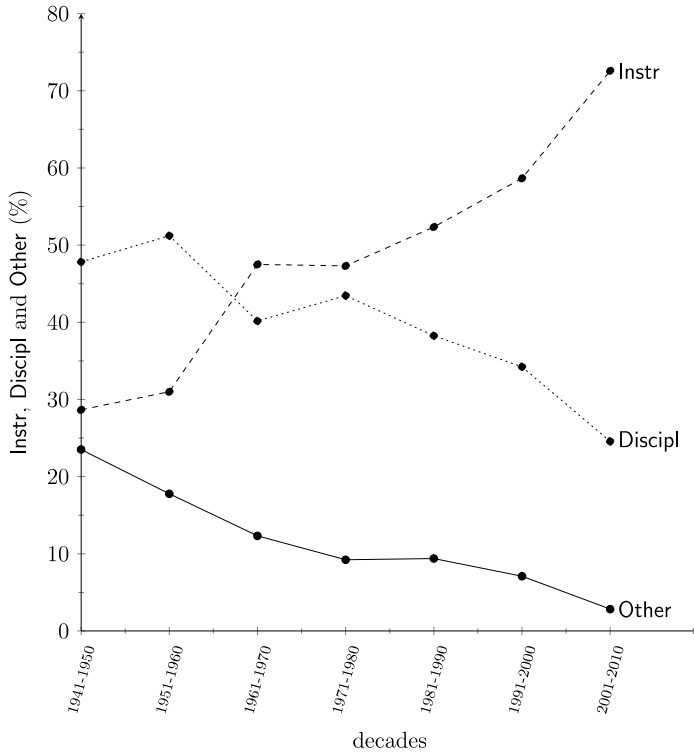


Fig. 6. What does this paper use logic for?

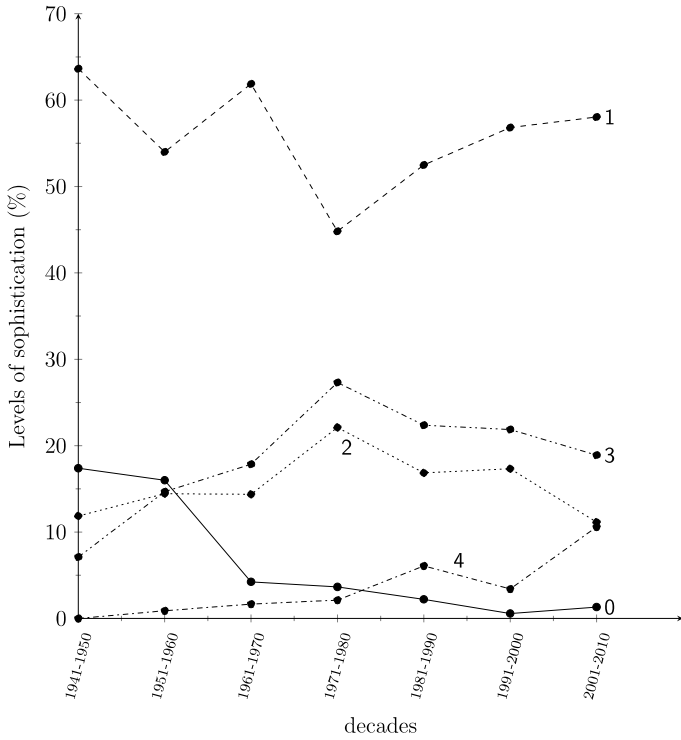
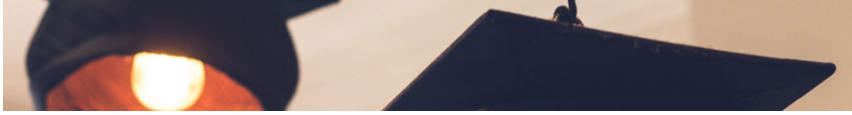


Fig. 7. Levels of logical sophistication.



### 3. Some considerations

Some methodological considerations can be put forth concerning the two studies described above. They concern three main issues: the motivation for quantitative analysis (question-driven vs. method-driven investigations); the kinds of data and corpora; human distant reading as opposed to computer-assisted distant reading.

#### 3.1. Question-driven investigations

The origin of both studies lies in specific research questions, which are raised in the context of traditional history of (analytic) philosophy, and by the conviction that it would be difficult to answer such questions by applying non-quantitative methods.

The first set of questions concerns the place of Wittgenstein in contemporary analytic philosophy or, perhaps more precisely, the relationship between two philosophical traditions, the analytic and the Wittgensteinian. Part of this story—the story of the decline of the Wittgensteinian tradition in analytic philosophy from the 1960s to the 1980s – has already been written (Hacker 1996; Tripodi 2009). According to such “received view” influence of Wittgenstein’s philosophy has been declining in the last decades for many different reasons: the predominance of American analytic philosophy over British analytic philosophy; the scientific, rather than humanistic, self-understanding of analytic philosophy in the United States; the misleading association of Wittgenstein to (the declining tradition of) logical positivism; the success of Quine’s anti-Wittgensteinian argument for the continuity between philosophy and the natural sciences; the widespread view, among analytic philosophers, according to which Wittgenstein’s a-theoretic metaphilosophy is untenable; several anti-Wittgensteinian

arguments about language and mind put forth by analytic philosophers such as Hilary Putnam, Donald Davidson, J.J.C. Smart, Jerry Fodor and some others; the rise of cognitive sciences; the revival of metaphysics fostered by Saul Kripke and David Lewis, and so forth (Quine 1951; Putnam 1962; Davidson 1963; Smart 1959; Fodor 1975; Kripke 1972/1980; Lewis 1973 and 1986).

Given this multifaceted explanation, however, many questions are still open and wait for an answer. At what pace did Wittgenstein's philosophy declined? Can we understand the relative weight of its different causes? What areas of philosophical production were more involved in the decline? In general, is it possible to measure the decline in any significant way?

It was quite natural, for us, to think of the application of quantitative methods, in order to tackle such questions, as we assumed that analytic philosophy is a paradigm case of academic philosophy and that, consequently, part of the answers could be found in the sociology of academia. Luckily Proquest provides the metadata of 30,000 U.S. Ph.D. dissertations in philosophy (1899-2015). As the choice for a subject matter of a dissertation is usually sensitive to fashions and trends, we thought that this corpus was not only interesting and worth exploring in itself, but it could be the right place to look at, in order to answer our remaining questions. Preliminarily, however, we had to enrich the corpus with newly acquired data: in particular, the data concerning academic careers. Then we analyzed the data in the way described above.

The second group of questions was addressed because of the need to clarify and test a widespread but vague view about the presence and role of logic in analytic philosophy. Many people seem to take it for granted that there is a very large amount of logic in analytic philosophy, that the role of logic in analytic philosophy is crucial, perhaps even constitutive, and that many or perhaps most analytic philosophers are logically sophisticated thinkers. However, this view is based on impressions rather than on the analysis of a large amount of data. Hence, like in the previous case, it was natural to rely upon quantitative methods, with a twofold aim: (i) to explicate the vague, impressionistic view about logic in analytic philosophy; (ii) to test the explicated view, thus providing a well-grounded confirmation or disconfirmation of it.

It seems to us that historians of philosophy and historians of ideas should be aware that generalizations in their disciplines (and, more in general, in the humanities) are methodologically awkward and take too often the form of un-

justified statements. Working as a traditional historian of philosophy, what are the evidences you can rely on to support the story about the decline of Wittgenstein in the history of analytic philosophy, or the idea that logic plays a crucial role in analytic philosophy? You may certainly rely on a fair number of influential articles and books. Still, you will only be able to read a small part of the relevant philosophical production. And things are even worse if you are interested in recent philosophical works, since the academic philosophical production has grown considerably during the last decades. Alternatively, you can trust your more or less well-established personal impressions, which ultimately derive from your acquaintance with the subject matter or the relevant philosophical *milieu*. Finally, you can also rely on semi-autobiographical accounts of what happened provided by people who played some role in the events. Although these evidences may be reliable enough to write a more or less adequate history, many details will inevitably elude the historical reconstruction.

In both cases our research was guided by problems and questions that emerged in our own previous work. It has to be emphasized that such a question-driven approach can be very burdensome and, in a sense, uneconomical. If for example your starting point is, as in our case, a specific question concerning the relation between philosophic academia and in particular the recruitment policies, on the one hand, and the developments in analytic philosophy in America, on the other hand, it is likely that you cannot find an easy and more or less ready answer in some preconstituted dataset that is already available. Thus, for example, as we will tell below more extensively, you have to build your corpus from scratch, starting with raw materials and enriching them; specific data can perhaps answer your question, but you have to work hard to obtain those very data, and this can cost you a lot of time and work. This has been our experience in the study on Wittgenstein and analytic philosophy: more than two years of preliminary work before we could start with our analysis and interpretation.

On the other hand, however, such a question-driven approach has also many merits, and it seems to us that it can be advantageous even from the point of view of the digital humanities, for three main reasons.

First, without a solid theoretical apparatus, strictly data-driven investigations are blind, and run the risk of being nothing but the curiosity-driven exploration of an available corpus (this, of course, can be an interesting and even pleasant task, but it is less likely to provide interesting results in the humanities than the



question-driven approach): it seems to us that Moretti's own work is an excellent example of an extremely ambitious question-driven approach (see many essays in Moretti 2013; yet, in a recent conference held in Turin—*La strada per Roma. La letteratura tra ermeneutica e quantificazione*, Nov. 20<sup>th</sup> 2019—Moretti seemed to pay credit to the fruitfulness of curiosity-driven explorations as well).

Second, analyzing data with quantitative methods is a risky task in itself, because the chance of finding random or illusionary correlations is quite high: a possible antidote is to work within domains which we are already well-acquainted with; this would make the interpretation of data easier and more solid, and this is still a fundamental task, even in so-called data-driven research.

Third, a question-driven approach can help us avoid a possible shortcoming, which is not unusual in the recent history of the digital humanities: the impressio, from the disciplinary point of view (that is, from the point of view of the history of philosophy, the history of ideas, but also, say, of literary criticism) of beating around the bush methodologically, so to speak. In other words, it seems to us that in recent years the method-driven approach in the digital humanities has shown its shortcomings, in particular its poor results from the point of view of the humanities themselves: if your main aim is to develop methods, it is not surprising that you pay little attention to having solid results concerning the contents.

Our suggestion is that if distant reading and data-driven research are first of all motivated by the wish to answer substantial questions, it becomes easier to avoid such possible limitations. Obtaining results that are interesting from the point of view of the traditional humanities is, at least in some cases, the deserved reward for an extremely long and costly research work.

It is worth noticing that a question-driven approach leaves open the possibility of bringing to the fore aspects of the investigated issue that were not necessarily under the investigator's attention since the beginning: for example, in the work on logic in analytic philosophy we realized that the articles requiring no logical knowledge at all in order to be understood (level 0) almost always belong to past traditions of logic, alternative to the mathematically oriented one that came to prevail in the 20<sup>th</sup> century; at first, we were not looking for this kind of logic, but we found out that this datum—notably, the disappearance of articles belonging to level 0—could be interpreted as one of the most clear markers of the acquired hegemony of analytic philosophy in the U.S.

### 3.2. Varieties of data and corpora

The kinds of data we analyzed in the two studies are very different from one another. Those which are taken into account in the work on logic in analytic philosophy are more traditional: they are just *texts*. As everybody knows, the relevant texts are to be found in philosophic journals, since analytic philosophy tends to mimic the natural (especially the biomedical) sciences in regarding articles rather than books as the standard scientific format. However, which journals should we include in our corpus? There are, of course, many possible criteria for the selection: citations, rankings, etc. However, in this case we felt confident enough, as domain experts, to select the five journals on the basis of our specific competence in this area; it seems to us that the selected journals are unanimously considered representative of analytic philosophy, and we also find it irrelevant whether all of them have always or in the considered time span being regarded as *the* most important ones.

The texts are made available by J-Stor, but they were too many (over ten thousand articles) to be read, even in a serial way and from a distant perspective. Therefore, we decided to focus on two sub-corpora. The first dataset is a heterogeneous purposive sample, which includes 20% of the entire corpus (approximately, 2,500 articles): for each year we selected and read one journal, rather than five, with a random rotation. This sample allowed us to investigate the corpus in each decade from the 1940s to the 2000s. It seems to us that there is no ground to suppose that the sample is biased. The second sub-corpus includes all the 1731 articles which have the value 'Logic' in the subject field provided by the Philosopher's Index (<https://philindex.org>). After manually eliminating the false positives, there were 1,622 articles left. Why did we combine the two different sub-corpora? Basically, because each of them provides a different kind of information. The former allows a coarse-grained level of analysis (which is more reliable), the latter a finer-grained investigation (which warrants an analysis of relevant sub-corpora concerning different philosophical sub-disciplines). Thus, they integrate well with one another.

The research on the decline of Wittgenstein is mainly based on *metadata*, rather than on texts: the metadata of the Ph.D. dissertations in philosophy defended in the United States from 1899 to 2015. The metadata includes the author of the dissertation, the title, the year of publication, the name of the supervisor,

the university, the department, the abstract, some keywords, and some further information. These are very different kinds of data from texts, though both of them are, so to speak, “readable” entities: however, we didn’t read the dissertations themselves, rather we read their titles and abstracts. And the, of course, we also had to enrich the corpus by adding a crucial information that was missing, i.e., the subsequent career of the Ph.D. candidates, thus integrating our dataset with what could be regarded as sociological data.

Moreover, since Britain used to be the main center of analytic philosophy, but then became more peripheral with respects to the United States, it would have been extremely interesting for us to make a comparison between U.S. and U.K. dissertations. This purpose required some additional work as well. The set of U.K. doctoral theses are collected by the Electronic Theses Online Service (EThOS). When searching for philosophical theses in the EThOS dataset (i.e., those theses with ‘Philosophy’ in the dc:subject field) we discovered that not all the retrieved records are actually related to philosophy, but sometimes to kindred disciplines such as sociology, religio, psychology, etc. Moreover, in some cases the subject field is empty, or it contains numbers or ‘noise’. The thesis subject may be of little relevance in this setting because in the U.K. there is no clear and univocal administrative classification of Ph.D. titles according to disciplines.

Happily enough, a team of computer scientists created for our purposes a system aimed at solving the problem of discriminating philosophical documents from documents of other disciplines. The attempt is based on the combination of a standard learning approach with a semantic one, as illustrated in Carducci *et al.* 2019 (this part of the research is not included in Bonino and Tripodi 2019, but we intend to present it in a future work).

The work on logic is a typical or even literal case of distant reading, in the original sense suggested by Moretti: indeed, we serially read the journals; actually, we didn’t properly speaking read them, but we rapidly browse them. The work on Wittgenstein and analytic philosophy, on the contrary, is different in kind: the nature of the data—bibliographic metadata and sociological data—requires a different kind of quantitative analysis, rather than the application of distant reading as originally understood. It seems to us that this latter work, however, shows something that is true of quantitative methods in general, namely, that taking a distant perspective invites (though by no means

forces) one to take an *external* approach to the history of philosophy. This is one further reason why we appreciate a distant-reading perspective very much, but that may be a matter of personal inclinations. If one had to draw a provisional moral here, one could suggest that, generally speaking, the frequent need to tackle such diverse and heterogeneous data and corpora should make us aware that obtaining interesting results by using distant-reading methods may be a slow and meandering process.



### 3.3. Manual distant reading

In both studies, computer-assisted techniques would not have been suitable for the required tasks. Therefore, in both cases we have deliberately decided to stick to Moretti's original method, which might be called 'human' or 'manual' distant reading. In the study on the decline of Wittgenstein, we reconstructed the academic careers of each Ph.D. student in our corpora by 'manually' using search engines. As far as we know, there is no computational tool available to fulfil this task yet, though it is not unthinkable to build one in the next future (incidentally, REPOSUM, one of the projects in which our group is involved, has taken some preliminary steps in this very direction).

Nor are there computational tools that are able to check whether there is logic in a given philosophic text, let alone whether the role of logic is instrumental or non-instrumental, or what the level of logical sophistication is. Of course, some argument mining projects are growing up, yet they do not seem reliable enough for our purposes.

Take, for example, the task of classifying instrumental and non-instrumental articles. The category of 'instrumental' is very important for our analysis, since it is a fundamental component of our explication of the prevailing view, i.e. the widespread but vague picture concerning the presence and role of logic in

analytic philosophy. *Qua* instrument, logic spreads throughout the entire body of philosophy, and this seems to make sense and explicate the prevailing view. We provided some criteria for instrumentality: an article is instrumental if (i) logic is present in it, and (ii) it is not pursued for its own sake, but to tackle a specific philosophical problem; moreover, (iii) such a philosophical problem is not a problem directly and exclusively triggered by a philosophical reflection on logic. At the same time, however, we left some room for intuition.

To put it easily (perhaps too easily, but we are not in the context of cognitive science): we human beings are not just machines, so that distant reading is not, for us, just a question of applying algorithms. Two different issues are involved here: *a*) intuition is not always reliable; *b*) intuition often depends on one's expertise and previous knowledge.

To make the first problem (reliability) less serious, we simply assessed the articles by a two out of three majority when only binary choices were involved, and discussed together the relatively few disagreements among the three authors in all other cases.

As to the second problem (the interference of different pieces of previous knowledge), we solved the problem by practicing a sort of *epoché*. Consider for example Georg Henrik von Wright's famous article "Deontic Logic", published in *Mind* in 1951. This is one of the articles that we had to classify: is it a 'logic proper' article, a 'philosophy of logic' article or an instrumental one? Based on one's expertise and, in particular, on one's peculiar metaphilosophical interpretation of von Wright's philosophical logic, one could argue that von Wright conceived of deontic logic and, more in general, philosophical logic as an instrument of philosophy, since his (explicitly declared) aim was that of providing an explication in Carnap's sense of philosophical (deontic) concepts. This claim is based on the following remark: although von Wright later became a pupil of Wittgenstein in Cambridge, he grew up as a Carnapian, when he was a young man, in Finland, under the supervision of his former teacher, Eino Kaila, and he never ceased to be this kind of philosopher.

Perhaps this interpretation is correct, but that is not the point here. Rather, we would like to raise some methodological questions. Is the above mentioned historical-philosophical interpretation relevant, and should it be regarded as relevant, from the point of view of distant reading? Should distant readers focus mainly on the paper under consideration, without taking into account any fur-

ther, external information, however interesting and correct it may be? Is, for example, “Deontic Logic” to be assigned to the logic proper category, rather than to the instrumental category, regardless of how one interprets von Wright’s intellectual biography and meta-philosophical preferences, simply because at the beginning of the article von Wright states explicitly that his aim is that of introducing a new logical formalism, deontic logic, for reasoning about ‘modes of obligations’?

In our study, we decided to answer this last question affirmatively, as we thought that von Wright’s statement at the beginning of the paper (“in the present paper an elementary formal logic of the deontic modalities will be outlined”) made it a paradigmatic case of a logic proper article. Moreover, if we didn’t apply to “Deontic Logic” the label ‘logic proper article’, then it would have been extremely difficult (and arbitrary) to apply that label to *any* further article.

Generally speaking, however, we find controversial whether the distant reader should modify his or her evaluation on the basis of his or her sophisticated and cultivated expertise. In other words, it is not obvious for us whether the distant reader should practice this sort of *epoché*. One might think that, to a certain extent, the distant reader should be an expert: after all, in the case under consideration (our work on logic in analytic philosophy), it would have been reasonable to select distant readers only in a relatively small group of people acquainted with logic and analytic philosophy. However, it seemed to us that the distant reader should at the same time be balanced enough, interpreting his/her task in a way that limits the weight of subjective interpretation. In our work we acted this way, putting our own exegetical and hermeneutic views in brackets and thus making ourselves more naïve readers than we actually were and are, but we are not confident enough to conclude that this attitude should be regarded as a general norm for a good practice of distant reading.

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