

Prolegomena for any Future Narrative Literaturemetrics

Julian David Romero Torres*

* Ludovika University of Public Service, Department for Science Strategy, HUNGARY
E-mail: julian.romero[at]uni-nke.hu

This paper introduces the concept of *narrative literaturemetrics*, a novel mixed-methods approach that applies the quantitative metrics traditionally used in bibliometrics to the field of literature. Utilising an extended version of Bourdieu's field theory, this study draws parallels between academia and literature, emphasising the applicability of concepts such as capital, field, and agents to literary analysis. Despite the evident similarities, there has been a surprising lack of field-theoretical studies employing bibliometric methodologies within literary studies. This paper addresses that gap by outlining the theoretical foundations and methodological considerations of *narrative literaturemetrics*. It discusses adapting bibliometric indicators to literary analysis and highlights the distinctions necessary to respect the unique norms governing literature and academia. Furthermore, the paper explores the emerging qualitative turn in bibliometrics, particularly the development of narrative bibliometrics, and its relevance to the proposed approach. By detailing the conceptual framework and potential applications of *narrative literaturemetrics*, this study aims to establish a comprehensive model for future empirical research in literary studies.

Keywords: scientometrics, narrative bibliometrics, narrative literaturemetrics, field theory

Article received on 4 March 2024. Article accepted on 13 June 2024.

Conflict of interest: The author declares no conflicts of interest.

Funding: The author received no financial support for the research, authorship, or publication of this article.

Introduction

Social scientists quite commonly use Bourdieu's field theory to analyse and interpret various societal realities. Still, there is a specific field of research with quantitative methodologies that can be adapted to the study of the field of literature, that is, analysis of the field of academia (Bourdieu, 1988; Demeter, 2020). Indeed, the similarities between academia and literature as social fields are clear, so it is rather surprising that, as far as we know, *informetrics* or *bibliometrics* are not applied in field-theoretical studies in the realm of fictional literature to the analysis of authors or other agents. In the following paragraphs, we introduce the most important similarities between the above-mentioned two fields to justify the scientific legitimacy of a mixed-methods analysis that we call *narrative literaturemetrics*. First, we delineate the most important considerations behind using quantitative metrics to analyse academia, and we show how past research has used field theory to interpret empirical data. Then, we show how the most relevant Bourdieusian concepts used by researchers in their bibliometric analysis – namely, capital, field, and agents – can be similarly used for literature research to those used in the analysis of academia. In this part, we will also discuss the differences between the two fields that have significant theoretical importance, as distinctions should be made to emphasise that the two fields – literature and academia – are autonomous fields with specific norms that characterise their operation (Labinger, 2023). We then discuss the latest, newly-developing tendency in bibliometrics and research assessment known in general terms as a *qualitative turn* (Aguillo, 2022). Specifically, we will introduce the main considerations behind *narrative bibliometrics* (Torres-Salinas et al., 2024) and its basic methodologies through which it is used to interpret large-scale quantitative data. Finally, we briefly introduce and describe the justification and methodology of a narrative literaturemetrics approach. We then discuss why this approach is unique in its analysis of the field of literature, and why it is important and necessary. Then, we introduce some conceptualisation and details of measurements.

We emphasise that we should clearly differentiate between the introduction, justification, and presentation of a model or approach and its application. Accordingly, it is normal for individual scholars not to use all the Bourdieusian concepts applied in field theory. Similarly, literature researchers do not have to use all the scientometric indicators that we present in the methodology part when analysing a given writer's reception in terms of narrative literaturemetrics. We argue that the presentation and implementation of scientific models or approaches always differ in the same way, that is, the latter is always much narrower. Of course, in most papers, and even in books, authors only introduce concepts that will be used in their analysis, but this is something that can be done only when the model or theory is well-known and, in Bourdieusian terms, already part of the academic *doxa* or Kuhnian *normal science*. However, in our case, this does not apply to our innovative approach (narrative literaturemetrics) alone, nor even to its corresponding scientometric counterpart (*narrative bibliometrics*) as that is a relatively new innovation in itself. Thus, it is absolutely necessary to introduce narrative literaturemetrics in its developed form, even if individual scholars will not (and cannot) utilise all the opportunities it offers for analysis in their particular research

projects. We have to emphasise again that the same thing always happens for all theories and more complex methodological approaches, as it does in our case of field theory and narrative bibliometrics.

Considering the former, there are several works that summarise Bourdieu's main concepts (Heilbron et al., 2018), and it is obvious that individual analyses – even very detailed and complex ones – use only a fraction of that which Bourdieu offers as analytical tools. For instance, Bajnok et al. (2022) focus mainly on *habitus* formation, Rothenberger et al. (2017) on *norms*, while the centre of Hunter's (2004) analysis is *doxa*. While these authors use many other concepts from field theory, they evidently do not use all of them, and the number of concepts they do use more extensively is limited to two or three, or just one. To mention another theory from the Hungarian context, we can name the Participation Theory of Communication (PTC), where authors typically use only one or two concepts of the theory when applying it to their fields of analysis, maintaining that what they are doing is implementing a more broad and complex theory (Horányi, 2007).

The same can be said in view of the latter, narrative bibliometrics. Torres-Salinas introduced the theory in several papers (Torres-Salinas et al., 2023; 2024) without applying all the concepts and measurements to the analysis of any specific case. In fact, the author provides some descriptive analyses in one of his papers (Torres-Salinas et al., 2024) as an illustration of the model he explains there, but the presented cases do not entail all the concepts of the model. This corresponds to the complex nature of narrative bibliometrics, because to understand the conception of this approach, readers should be familiar with the totality of the model since the concepts it uses are interconnected. However, when illustrating or implementing the model, the application of all the concepts is no longer necessary.

On the basis of the above, we have constructed the introduction to our approach in a manner intended to cover all the possible areas in which the model could be applied. This is the first time that *narrative literaturemetrics* will be used, and so the more detailed introduction and presentation is related to field theory and narrative bibliometrics because in the case of these approaches, and field theory in particular, we have illustrations of applied research, as well as theoretical introductions. We argue that all the concepts and measurements that are used in field theory and narrative bibliometrics can be used – *mutatis mutandis* – in our presented narrative literaturemetrics, but that what is then actualised is dependent on the field in which the methodology is applied. In our view, this is where the difference between presenting a model and applying it lies. Given that this current theoretical paper is the first to present narrative literaturemetrics, our aim here is to discuss the dimensions and variables the model offers, and not to present a particular empirical analysis, that should be the task of future endeavours.

Bibliometrics: A quantitative turn is the analysis of academia

Considerations in using quantitative metrics for the assessment of scientific work are manifold. It was the early 1980s when different measurements were developed to assess

the performance of various agents in higher education and research, such as universities, research institutions and departments. In the 2000s, assessments of researchers through a variety of means with bibliometric analysis became mainstream in the Western world (Larivière & Costas, 2016). Alongside the neo-liberalisation of academia (Demeter, 2020), the funding of scientific research has become contingent upon the productivity and impact of research projects because both funding agencies and society want to see that public money is spent effectively (Savage, 2000). Moreover, the expansion of higher education and scientific research has brought about an almost exponential growth in the number of researchers operating worldwide, making it impossible to assess their work without statistical procedures (Sedighi, 2020). Furthermore, the infamous *publish or perish* paradigm (Parchomovsky, 2000) made scientific publications the most important component in measuring academic excellence for research institutions and individual researchers, generating a significant growth in the number of publications and citations (Bornmann & Mutz, 2015). In short, the two interrelated phenomena urged on the introduction of quantitative measurements in research assessment. First, it appeared evident that there was a legitimate public need to see the effectiveness of public investment in scientific research, so the fact that academic work should be measured became clear (Tóth et al., 2024). Second, the measurements could no longer be fully qualitative, as in the case of peer review, because that system was unable to handle the enormous number of authors and papers. Moreover, some scholars even argued that peer review might include severe bias with no guarantee of transparency (Goyanes & Demeter, 2021). Accordingly, the classic peer review in which research panels and anonymous peers evaluated research performance *in the backroom* became the subject of harsh criticism, and the usage of bibliometrics became one of the possible tools for making research evaluation more transparent, more objective, and more effective (Assimakis & Adam, 2010).

The growing need for the internationalisation of higher education and scientific research gave new fuel to the popularity of scientometrics because it goes hand in hand with the need for building international databases and research assessment systems that can be applied internationally, unlike national or regional measurements (Deardorff & van Gaalen, 2023). Moreover, the introduction of international university rankings such as Times Higher Education (THE), the QS Ranking, or the Shanghai Ranking (ARWU) has made universities around the world adopt the metrics that are used by such rankings (Schmitt, 2012; Tomlinson & Freeman, 2018). For example, international rankings use Scopus or Web of Science to calculate research excellence when ranking universities on the general and the by-subject lists (Burriss, 2004; Pietrucha, 2018). Evidently, the widespread use of bibliometrics became possible for both scientometrists and institutions with the development of digital databases such as the Web of Science (now owned by the Clarivate™ analytics company) and Elsevier's Scopus, which offer a huge amount of data for bibliometric analysis (Assimakis & Adam, 2010).

In the last two decades, there has been a growing interest in the development of robust scientometric tools that work with quantitative data gathered by Scopus or the Web of Science that are appropriate for measuring and evaluating the most important aspects of scientific excellence: productivity, impact, usage, and social contribution

(*altmetrics*). In the following paragraphs, without going into technical details (for more see, e.g. Blasco et al., 2024), we introduce the most important considerations behind conceptualising and measuring scientometric indicators in assessing scholarly publications.

Production

The productivity of different agents, such as research institutions and individual scholars, can be measured both qualitatively and quantitatively, and there is broad and sometimes harsh debate about the correct methodology to appropriately relate publications and excellence. For instance, production could simply be measured by the number of published works without reference to genre or outlet. However, there is no justification for this method, as both scholars and research assessment agencies are aware of the fact that there are significant differences between different types of publications (Bihari et al., 2023). For instance, some scholars might aim to publish as many papers as possible without referencing genre and publication outlets. In contrast, others might publish fewer papers but in more prestigious outlets (Larivière & Costas, 2016).

However, while there are different approaches to measuring scientific output, no one thinks that quantitative information alone is able to frame scholarly excellence; thus, qualitative aspects, typically genre and journal prestige, play an important part in assessing research production (Blasco et al., 2024). Regarding genre, there are very important differences between disciplines and continuous changes over time in the manner in which qualitative values for different genres in different disciplines are rendered. For instance, books, especially longer monographs, were favoured in arts and humanities for a long time, but nowadays, both national and international agencies have begun to emphasise peer-reviewed journal articles (Kwiek, 2012). Notwithstanding the emerging importance of journal articles, publishing monographs – ideally at prestigious publishers – is still much appreciated in the humanities. However, in social sciences it is papers published in top-ranked international journals that may add more prestige to authors than book chapters, conference proceedings, or even monographs. Finally, in natural sciences, life sciences, engineering, and related disciplines such as computer science, almost the only outlets for researchers to publish their works are peer-reviewed journal articles, and monographs are typically used in higher education, and not in research in the narrower sense.

Beyond genre, the venue for publication is also a significant factor in research assessment as, for instance, a single paper in a well-known, prestigious journal might be worth more than a legion of papers in unknown or obscure outlets (Callaham et al., 2002). Accordingly, most established scientific databases have used measurements to evaluate journal prestige, such as Scimago's SJR or the Web of Science's Journal Impact Factor (JIF). However, SJR and JIF alone cannot describe the overall value of the journals because there are significant differences in citation and publication trends across disciplines thus, for instance, impact factors in philosophy and computer science cannot be compared in a meaningful way (Kaur et al., 2012). Accordingly, beyond JIF and SJR

values, scholars began to use journal quartiles that make it possible to compare journals within the same discipline (Miranda & Garcia-Carpintero, 2019). Thus, while there are different measurements to compare journal prestige, one point is clear: the venue of publication should be considered when assessing the publishing activity of scholars, and measurements based on mere quantitative calculations are not adequate tools in evaluating productivity.

It is necessary to add a few words on another important component of productivity: co-authorship. Research has shown that the number of co-authors per paper has significantly risen over the past few decades, and this raises several questions about the meaning of *authorship* and the added value of different researchers to a published paper (Hagen, 2010). Significant differences exist across disciplines, for instance in collaboration and, accordingly, in the number of co-authors. For example, single-authored papers are still mainstream in arts and humanities, but in social sciences, and in hard sciences in particular, papers are typically written by many authors (Goyanes et al., 2023). While a lot of effort has been made to develop research assessment systems that can deal with the manifold factors of publishing (Blasco et al., 2024), we still don't have scholarly agreement on the exact calculations by which the contribution of different co-authors can be demonstrated.

Finally, in relation to research collaboration and co-authorship, we must briefly discuss internationalisation, which is one of the most important trends in research and higher education in the past few decades. While there are instances where the co-authors of a given article do work in the same institution, it is more common for co-authors to work in different countries. Hence, collaboration and co-author networks are the most important bases of internationalisation (Newman, 2001). Accordingly, when assessing publishing excellence, we need to consider the co-authorship network in which different scholars participate since, beyond productivity, it is that which shows the international embeddedness and reputation of scholars (Pan et al., 2012).

Impact

Beyond prolificacy or research productivity – these terms relate to the same factor, namely, the number of publications – the most frequently analysed aspect of academic publishing is impact, typically measured by the number of citations (Tahamtan et al., 2016). The number of citations, or academic mentions, is considered an adequate measurement of importance or impact because the fact that a given research paper is mentioned in another academic text emphasises its relevance (Baird & Oppenheim, 1994). Moreover, it is often thought that the most cited papers can shape the development of their disciplines as they become *classics* that are read by the majority of the disciplinary community. Thus top cited papers significantly impact their related fields, while the impact of publications that are not cited can be questioned. In other words, while prolificacy and productivity can be considered to be the result of the authors' efforts, impact and the number of citations are external and so reflect the work's reception in the peer group. Impact can also be related to academic trends

since *hot topics* are always associated with *trending papers*, which means the most cited papers. Top cited papers provide a snapshot of a given discipline, showing which subfields, theories, and methodologies the academic community acknowledges. In contrast, more peripheral topics and theories are typically associated with less cited publications (He et al., 2009). Thus, while the citation counts of researchers show their impact as individuals, top cited papers show prestige hierarchies within a discipline or specific research field. Here, we can distinguish between self-citations, where an author cites his or her own works, and independent citations, where other scholars refer to a given author's work. While self-citations can be useful and relevant, there is a general agreement that because science is a societal enterprise, the real impact of research projects and individual scholars' true impact can be measured by the number of independent, external citations (Glänzel & Thijs, 2004).

Another aspect of the academic publishing system in which citations play a crucial role is the assessment of journals because some of their most important values – for example, their impact factor and their H-index – are calculated by the number of citations (Bornmann & Daniel, 2007). Top cited journals have better positions on different international rankings such as Scopus or the Web of Science, which makes them increasingly prestigious. Accordingly, they receive ever more submissions, and they can be – in some cases, extremely – selective. It is common for the most prestigious journals to have an acceptance ratio of less than five percent. If a journal rejects 95 percent of the papers submitted to it then the thought that the papers it does publish will be of a higher quality than for the journals that accept the vast majority of submissions is actually plausible (Stephen, 2011). Beyond journals, citations are also considered in the case of international university rankings, where the scientific impact of universities or departments is calculated by the number of citations for the works of the staff members of the analysed universities and departments (Johnes, 2018). These measurements are restricted to citations in Scopus and Web of Science so, as we have seen in the case of publications, the publication outlet is of great significance, and there are stark differences between citations because a specific kind of citation – namely, those from peer-reviewed, indexed journals – carry much more weight in calculating impact than other kinds of citations.

Usage

As laid out above, citations are the *medium* for measuring scientific impact, as citations in academic journals are considered a good proxy for evaluating the scholarly impact of a research project (He et al., 2009). However, it is not obvious that once a research paper has been read it will also be cited. There has been an enduring scholarly debate on how citations represent accord with the results or interpretation of a given piece of research. For example, imagine that a research group publishes a paper in an academic journal that found a particular interaction between variables A and B. Other researchers, having tested this interaction then find no association between the two variables. What can they do? They can obviously cite the first paper stating that their research has produced results that do not confirm past research findings. They can shed light on

methodological frauds or weak points in the interpretation of the original findings. One might then reasonably wonder if the citation has signified the impact of the original study in a positive sense or has perhaps even weakened the significance or plausibility of the initial study. One can argue that a *negative citation* of this kind may falsify former studies or at least question them. In contrast, others might think that negative citations are as important as positive ones because they show the importance of the research topics and papers. Thus, while a new study might challenge previous research results, citations show the most important studies that should be cited, even when the results are questionable.

In relation to this topic, international bibliometric databases have begun to use usage counts that are considered meaningful counterparts to citation counts. In case of Scopus and SciVal, there is now an option to see the usage of papers, which may differ from citations. According to SciVal, there are two main salient rationales in explaining the relevance of view numbers. First, they are more immediate than citation activity. Citations are relatively slow in coming because they appear in research papers which scholars have to write and then publish, a process that can last for several years. Usage metrics, however, are the sum of abstract viewings and clicks on the link to see the full text at the publisher's website (SciVal, 2021), so an interest in a research paper appears much earlier in usage counts than in citation counts. Second, "usage counts represent the interest of the whole research community, including undergraduate and graduate students, and researchers operating in the corporate sector, who tend not to publish and cite" (Rajkó et al., 2023). Finally, usage counts could help to show the significance of research projects that are published with the expectation of being read or widely used rather than being extensively referred to in other scholarly works (SciVal, 2021).

Altmetrics: The social impact of scholarly work

The above-mentioned metrics are suggested as measures of different aspects of research excellence. However, there is a general feature that applies to all of them, that is, they measure importance but in a narrower academic context (Demeter, 2020). Scientists, however, do not work in a societal vacuum, and academia is embedded in a wider social context. For example, in most cases, academia is not financially independent, as universities and research institutions are either state-funded or private institutions, which are accountable to their maintainers. Moreover, in the era of the neoliberal university (Rustin, 2016), higher education institutions should serve a great variety of interests beyond the scholarly community: they have to consider the expectations of the market in education and training, the requirements and policies of research funding agencies, the interests of the general public, and they should even take state regulations and priorities into account (Muñoz-García, 2019). Thus, measuring the social impact of research projects is now an important part of science assessment at local, national, and international levels. Showing how a given researcher's work contributes to society is part of their qualification, and most of the prestigious international grants, for instance the

majority of European Research Committee grants, make discussion of social impact in research proposals mandatory.

The wider social impact of research work is measured by various tools that are related to social media. The summative name for research metrics of this kind is *Altmetrics*, which goes back to 2010 and *Altmetrics: A Manifesto* (Priem et al., 2010).

Among others, Altmetric research is related to understanding how science is disseminated and discussed across various communication channels, the way in which social media can cover the most important scientific topics, or an audience engages with science (Fang et al., 2021). Altmetrics might use softer indicators than standard scientometric research and, on many occasions, it focuses more on rhetoric, communication, language, and persuasion than the precise scientific content. Accordingly, it is easy to see that Altmetrics grabs a different aspect of the publishing system than scientometrics, laying more emphasis on the reception of the general public, or, in other words, on the reception of the wider audience rather than that of *the profession* alone.

As we have seen above, bibliometric research deals with two interrelated issues: the production of researchers and the reception of their work amongst professionals and the wider audience. As we will argue later, applying bibliometrics to analyse academia can be useful –*mutatis mutandis*– in empirical analysis of the literary field. However, in order to do it in a meaningful way, first, we have to justify how theoretical tools relate to empirical data. In the next part, we briefly introduce how past research used field theory to interpret bibliometric data. We then argue that field theory can describe the similarities and differences between the field of academia and the field of literature. Bourdieu and his followers have already analysed the differences and distinctions between different social fields, such as literature and academia. So here we describe only those aspects related to our empirical measurements because, as far as we are aware, no studies have been dedicated to applying scientometric tools to an empirical field-theoretical description of the literary field.

Field theory in bibliometric research

As mentioned earlier, field-theoretical concepts are widely used to analyse different societal realms, such as literature or academia. However, the empirical tools used to justify field-theoretic descriptions are manifold, and there is no general agreement on which methodologies are the most appropriate for field analysis (Sapiro et al., 2020). For many researchers, Bourdieusian analysis can be conducted mainly by deep qualitative data, typically through narrative interviews (Bourdieu, 1999a; Hadas, 2021); others use case studies (Havas & Fáber, 2020), focus groups (Ferrare & Apple, 2015) or historical evidence (Crossley, 2004). From the perspective of *narrative literaturemetrics*, the most related approach is that in which empirical, quantitative data is interpreted theoretically, as was the case in the field-theoretical interpretation of bibliometric data in the analysis of academia. Given that our invention, *narrative literaturemetrics*, will creatively and critically use bibliometric measurements to analyse literature, first we need to introduce the main field-theoretical concepts with their corresponding measurements.

The field

The field is the main concept of the Bourdieusian description of literature as a social phenomenon. The field is the symbolic (and in many ways, physical) place where different agencies strive for position in order to gain control, power, and appreciation (Bourdieu, 1988). Bourdieu made it crystal clear that field, agents, and capital are interrelated concepts that cannot be understood without reference to each other: the field is “the space of the relations of force between the different kinds of capital or, more precisely, between the agents who possess a sufficient amount of one of the different kinds of capital to be in a position to dominate the corresponding field” (Bourdieu, 1988, p. 34). This conceptualisation proved to be useful for the description of many aspects of academic life, as it is reflected in a legion of studies dedicated to the Bourdieusian analysis of academia (Sapiro et al., 2020; Wacquant, 2018; Bauder et al., 2017; Thatcher et al., 2016; Wiedemann & Meyen, 2016; Hilgers & Mangez, 2015; Grenfell, 2014; Leung, 2013; Rothenberger et al., 2017; Recke, 2011).

When the empirical data for the field description consists of quantitative bibliometric information, as it often does when the subject is academia, researchers try to apply scientometric indicators to the corresponding field-theoretical concepts. For instance, scholars talk about the academic publishing field (Demeter, 2020) that is shaped by many agencies, including individuals, institutions and symbolic agencies such as language or rhetoric. It is well known, for instance, that English, the academic lingua franca of recent decades, has characterised the academic publication industry to a very significant extent (Canagarajah, 2002). Being the sole, internationally accepted language for academic use, academic English has become an unavoidable factor in the field, one which significantly impacts the position of all the participating agents. Those who have academic English as part of their education – typically native English speakers – have a significant advantage over those agents who have to learn English as a second language. The disadvantage of non-native English speakers can be systematically evinced at all levels of the academic field, but the most striking inequalities that are caused by the international hegemony of academic English can be found in publishing. In the realm of science, the vast majority of books and journal articles are written in English, and in the case of the most prestigious journals, the rate of English-only papers can reach 100 percent (Sugiharto, 2021). But that is not all because the same holds true for the majority of international research proposals that should be written in English, without reference to the origin of the scholar who applies. Moreover, the official language of international academic conferences is, in the vast majority of cases, English. Peer review is in English, editorial board meetings are held in English, and selection committees and research agencies evaluate proposals written in English, so English dominance can be found at all levels of the field. When researchers talk about the *price of entry* (Bourdieu, 2004) in field theory, they refer to the fact that mastering a specific set of knowledge, and collecting an appropriate quantity of capital, is essential in gaining entry to a given field. From the above-mentioned considerations, it is evident that mastering academic English is one of the most important parts of the *price of entry* into the field of academia.

However, language is only one of the most important aspects of the Anglo-Saxon dominance of today's international academia. Another characteristic of the field is the dominance of Anglo-Saxon academic writing, which is far more than a mere question of language. Of course, a crucial part of Anglo-Saxon academic writing is that its language is almost exclusively English; and beyond that it entails a specific logic, a specific style, and a specific, culturally defined understanding of how to do and then publish science. The academic prose or the style of the academic essay is defined in various handbooks, and its basics should be learned during education in countries with native English. The standards of so-called international academic writing – which is, in fact, Anglo-Saxon academic writing – consist of a specific order in which the writing should be developed, starting from the *introduction*, followed by the *description* of Methodologies, reporting the *results*, providing a *discussion* of the results, offering a *summary* and then, finally, stating the *limitations* of the study (Oshima & Hogue, 2007).

However, in several cultural contexts, this is not the mainstream way in which academic writing is formulated. In world regions beyond the Western world – such as Asia, Latin America, Africa, or Eastern Europe – there are different traditions regarding how to do research, and on how to build scholarly texts (Canagarajah, 2002; Demeter, 2020). However, since the field of international academia is, beyond question, defined by Anglo-Saxon standards, it is legitimate to talk about the Western colonisation of international academia by not just economic means but also symbolic, cultural, and other soft power hegemonies (Canagarajah, 2002). In other words, as several researchers have concluded, international scholarly discussions are almost exclusively open only to those scholars who present their writings in English. There may be some exceptions, but scholars speaking or writing in other than English (usually termed *national*) languages can expect significantly less international recognition (Lauf, 2005; Liu et al., 2018).

Beyond the above-mentioned two determinants, namely language and rhetoric, there are a lot of vectors that shape the relations of the field through power positions, norms, legitimisation mechanisms and, most importantly, through defining the types of capital that should be accumulated in the field. In the following paragraphs, we delineate the most important kinds of capital that characterise the behaviour of agents in academia.

Capital

Bourdieu's concept of capital can be understood as an expansion of the traditional economic interpretation, as his aim was to broaden the understanding of *capital* by applying it within a broader framework of exchanges in which various assets are transformed and traded within intricate networks across different domains (Demeter, 2018). He seeks to shift the focus from the limited scope of commercial economic transactions to a broader exploration of cultural exchanges and valuations within an anthropological context, wherein economics represents just one aspect, albeit a fundamental one. It is noteworthy, however, that other types of capital, such as cultural and social capital, can be viewed as forms of economic capital that have undergone a transformation process (Grenfell, 2014).

Capital accumulation in academia may be the most investigated topic amongst Bourdieusian scholars focusing on research and higher education. Bajnok et al. (2022), for instance, specified many kinds of capital necessary for reaching power positions in the academic field such as that researchers with more academic capital have more positive academic role models, more international experience (even in their childhood), are more familiar with international academic norms, and generally have a more critical attitude, which is an elementary aspect of scholarly work. Beyond symbolic and cultural capital that can be acquired through formal education, scholars talk about supervision or supervisory capital related to the role of informal education. Supervisors can be important sources of academic capital beyond formal education: they can teach international standards even in a national context, they can share their professional networks, providing a huge amount of social capital, and they can serve as appropriate role models for learning academic habitus (Bajnok et al, 2022).

Agents

The description of agents in any given field is of crucial importance, as it is they who shape the field through their activities, their positions and their habitus, and they are the subjects that accumulate capital (Bourdieu, 1988; Grenfell, 2014). In relation to the field, agents can be either *orthodox* or *heterodox*. Orthodox scholars have already established figures – individual, collective, or institutional – in the field of forces with considerable capital, who possess power positions. It is they who shape and maintain the field's norms and in this aspect they are part of *normal science* in the Kuhnian sense (Kuhn, 1997). In most cases, orthodox and heterodox agents represent different actions that can be characterised as push and pull activities (Demeter, 2018). In academia, orthodox scholars strive to maintain their hegemony, including the hegemony of their norms and accumulated capital. For instance, in international science, top positions are maintained by the elite agents of the Western world, whether individual, collective, or institutional. Typical examples of individual agents are scientists who strive to attain power positions in academia. If an agent's operation is successful in the field, it can be said that they have and use the field-specific, appropriate habitus. They receive tenure, promotions and, with that, opportunities to emerge as scholars. They can become leading figures in a field and, in many cases, internationalise their activities through cooperation and mobility.

Just as individual agents collect individual capital in various forms, collective and institutional agents can save collective or institutional capital (Demeter, 2018), as in the example of research groups and teams, laboratories and institutions, departments, and formal and informal communities with limited – but extant – autonomy. Universities, disciplines, countries, and world regions – and in the context of society as a whole, even science itself is an institutional agent when we analyse its position in a historical context, connected with religion, political ideology, and other societal agencies – these can all be characterised as institutional agents who strive for better positions in a wider context.

As Demeter (2019) has previously presented, differences in capital accumulation for the agents of international science, as a field, can be interpreted in a world-systemic framework while also retaining the Bourdieusian terminology. Based on this categorisation, we offer a modified scheme with which to interpret the positions of agents as they operate in the field of struggle (Bourdieu, 1988), focusing on *orthodoxy* and *heterodoxy* as the main concepts in our categorisation (Table 1).

Table 1: Characteristics and measurements for orthodox and heterodox agents in academia

Agents	Orthodox	Heterodox	Measurements	Variable
Individual				
Scholars	Working at elite universities	Working at the periphery	University position on prestige rankings	Ordinal
	Educated at elite universities	Educated at the periphery	University position on prestige rankings	Ordinal
	Senior scholars	Junior scholars	Academic seniority, expressed in position	Ordinal
	Highly productive	Less productive	Publication count	Continuous
	Prestigious publication	Publication in less visible outlets	Quartiles, deciles SJR, IF	Ordinal Continuous (normalised)
	Highly cited	Rarely cited	Citation count	Continuous
	Occupy gatekeeping positions	Lack gatekeeping positions	Positions with prestige hierarchies	Nominal
	Over-represented in committees, associations, editorial boards	Under-represented in committees, associations, editorial boards	Positions with prestige hierarchies	Nominal
Star positions in collaboration networks	Peripheral positions or distracted from the network	Central network positions	Continuous (network properties)	
Collective				
Research groups	Overfunded	Underfunded	Received fund	Continuous
	Affiliated in elite institutions	Affiliated in peripheral institutions	University positions	Ordinal
	Collaboration networks with elite institutions	Loose collaboration networks		
	Highly productive	Less productive	Publication count	Continuous
	Prestigious publication	Publication in less visible outlets	Quartiles, deciles SJR, IF	Ordinal Continuous (normalised)
	Highly cited	Rarely cited	Citation count	Continuous
Committees	Over-represented	Under-represented		
Departments	Highly productive	Less productive	Publication count	Continuous
	Prestigious publication	Publication in less visible outlets	Quartiles, deciles SJR, IF	Ordinal Continuous (normalised)
	Highly cited	Rarely cited	Citation count	Continuous
	High positions on international rankings	Lower positions or not listed on international rankings	Ranking positions	Ordinal
Institutional				
Language	Academic English	Language other than English	Interlingua position English International Regional National	Nominal
Rhetoric	Anglo-Saxon rhetoric	Different writing style	Structure of paper	Nominal

Agents	Orthodox	Heterodox	Measurements	Variable
Genre	Research paper	Other genre	Genre	Nominal
Associations	Established in the West	National character	National diversity	Nominal Continuous (Simpson)
	Has Western leadership	National leadership	National diversity	Nominal Continuous (Simpson)
	Organises conferences in English	Organises national conferences	National diversity	Nominal Continuous (Simpson)
Universities	Occupy top positions on international rankings	Lower positions on international rankings or not ranked	Ranking positions	Ordinal
	Has international students and staff members Staff members typically educated in the West	Low national diversity in students and staff members Staff members are typically educated in the same country	National diversity of students and staff members Education trajectories of staff members	Nominal Continuous (Simpson) Network properties
Publishers	Publishes in English	Publishes in other languages than English	Interlingua position – English – International – Regional – National	Nominal
	International distribution	National distribution	National diversity and network of the distribution	Nominal Continuous (Simpson) Network properties
	Extensive marketing strategies	Weak marketing strategies	Publishing activity	Continuous Nominal
	Located in the West	Located at the periphery	Location (world-systemic)	Nominal
Nations	Western/Central countries of the Global North	Countries of the Global South and the Semi-Periphery	World-systemic positions	Nominal
World Regions	North America, Western Europe, Developed Asia	Developing Asia, Africa, the Middle East, Eastern Europe, Latin-America	World-systemic positions	Nominal
The Academia	Life sciences, engineering, computer science	Humanities, social sciences	Public spending on the sector	Continuous (normalised)

Source: Compiled by the author.

As stated earlier in this section, scholars who analyse a given segment of the academic field never use all the concepts presented in the table above, because their analyses implement and do not encompass the model. Accordingly, literature scholars who sympathise with our approach can select from a great variety of the variables presented above, such as the measurements related to: language, genre, country, world regions, scientific associations in which writers participated, publishers, the academic reception, and educational trajectories. All form possible spaces in which to collect social capital, and, evidently, the analysis can cover the majority of the corresponding individual agents, typically the writers, editors, academics, and translators that shape the literary field.

Narrative bibliometrics

The development of narrative bibliometrics is relatively recent, although its foundations were laid as early as the 1980s, and some researchers even assert that the main considerations behind narrative bibliometrics have always been part of bibliometric research (Moed et al., 1985). As mentioned above, using bibliometrics in research assessment partially resulted from recognising the shortcomings of the ever subjective peer review. For instance, while it uses more detailed qualitative data and is more personalised than bibliometrics, peer review does contain the elements of subjectivity, discrepancies can appear in the evaluations, its review process is not transparent, and impartiality is not always present (Torres-Salinas et al., 2023).

In the last decade, however, we have been experiencing a new trend in research assessment that has attempted to marginalise or eliminate bibliometric analysis from research assessment. According to this trend – expressed in various manifestos such as the Declaration on Research Assessment (DORA) in 2012, the Leiden Manifesto for Research Metrics in 2015, or the Coalition for Advancing Assessment (CoARA) in 2023 – the use of metrics in research assessment might distort the real contribution of researchers and research projects, so it should be substituted by qualitative peer review (Pérez Esparrells et al., 2022). While there are slight differences between what these manifestos claim, they typically contest three aspects of scientometrics. First, they argue that journal-level indicators (e.g. JIF) cannot be used in the assessments of research papers because the evaluation should be related to the papers, not the journals in which they are published. Second, they strive for a more diverse evaluation of research production that does not focus on journal papers alone but on other forms of publications, such as reports, databases, policy papers, etc. Third, they call for more open science, which usually refers to the application of the open access publication model (Torres-Salinas et al., 2023).

We need to mention that so-called bibliometric denialism (Torres-Salinas et al., 2023) works as a *straw man argument* because scientometric literature already addresses the majority of the problems spotted by denialists. Regarding the topics of the above-mentioned manifestos, first, we must emphasise that disciplinary differences between the publication and citation trends have been considered throughout the history of bibliometrics (Moed et al., 1985), and most of the extant research assessment systems are well aware of these disciplinary differences. For instance, both the Hungarian Academy of Sciences and the Hungarian Accreditation Committee use a variety of metrics to assess various academic fields and, in some cases, even subfields. Second, the same holds true for the publication genre: while research papers hold more prestige in the natural sciences than book chapters, monographs are still the most appreciated forms of publication in the humanities. Finally, open science models are business models with nothing to do with scientometrics or bibliometric indicators. These considerations had already been clarified in *Evaluative Bibliometrics*, which promoted a fair, rational, and limited use of bibliometric indicators (Torres-Salinas et al., 2024).

However, that a qualitative turn in research assessment continuously develops in many parts of the Western world remains true. The question is how the scientific community can agree on the forms and methods of appropriate research assessment that retain the strengths of scientometric analysis while also taking advantage of qualitative assessments (Bordignon et al., 2023). One possible solution is the method known as *narrative bibliometrics*, which was recently developed by Spanish scholars (Torres-Salinas et al., 2024). In the words of its developers, narrative bibliometrics can be defined as “the use of bibliometric indicators to generate stories and narratives that allow for the defense and exposition of a scientific curriculum and/or its individual contributions within the framework of a scientific evaluation process” (Torres-Salinas, 2023). This method aims to combine the strongest parts of both quantitative and qualitative assessments: the transparency, objectivity, reliability, and verifiable nature of bibliometric calculations and the multidimensionality, personality, contextuality, and variability of qualitative assessment. In other words, with narrative bibliometrics, a deep, critical, historical, and socially contextualised individual narrative on a given scholar’s operations in the analysed field can be developed based on theoretical and historical knowledge and large-scale, scientifically collected, and analysed empirical evidence.

There are five interrelated pillars for any narrative bibliometric analysis from which the first, *replicability*, relates to the transparency and correctness of the methods. Data sources and methodologies should be reported as clearly as possible so that other researchers can replicate the analysis. The second pillar, *uniqueness*, refers to the need to highlight the most important contributions of scholars because the same quantitative values can represent various contributions for different individuals. For instance, a given scholar might emphasise the translations of their work or the number of citations in a given language, which might for others be unimportant. It depends on many issues, such as the field of research, the position and the career trajectory of scholars, their attitudes toward diversity, their policy aims, and so on. In other words, the pillar of uniqueness demands individualising quantitative data. The third pillar, *adaptability*, holds that the definition of *scientometric* varies across different disciplines and research fields, so there is no general way to interpret quantitative bibliometric data. The fourth pillar, *comparability*, argues that comparisons with other colleagues in the field are not necessary because one’s merits can be assessed without creating an environment of undue competition. This pillar obviously resonates with the pillar of uniqueness by which scientometric indicators should be interpreted individually. Finally, the fifth pillar of narrative bibliometrics is *contextuality* by which the qualitative and quantitative data should be interpreted in a social and historical context. While, as we will illustrate below, there are significant differences between the field of academia and literature, the most fundamental pillar of narrative bibliometrics – the use of empirical data in an individualised qualitative context – can be applied well to the analysis of the literature field to provide a scientific evidence-based qualitative portrait of various literary figures.

Narrative literaturemetrics: A theory-based qualitative interpretation of quantitative bibliometric data

As stated above, the theoretical model of the *field* maintains a conceptual and methodological structure that allows for the analysis of any social space, which leads to the fact that literary and academic fields can be understood and represented under structurally homologous schema. Moreover, the theorisation includes the analysis of the habitus of the agents in the academic field, the norms that govern that field, and the kinds of capital that the agents typically need to accumulate to acquire power positions. The description of the academic field entails, in many cases, an analysis of the struggle between orthodox norms and scholarship (field of power) and revolutionary approaches (field of struggle). The progression of science occurs in this *battle for power positions*: what was once part of the scientific revolution later becomes a part of normal science. In his remarkable book *State Nobility* Bourdieu (1996b) analysed in detail how labour (and production) is related to capital accumulation in academia and how habitus can govern the paths that agents can walk to reach power positions in their field. As briefly mentioned above, the field-theoretical description of academia can be extended by global perspectives such as decolonisation theories, dependency theories, or world-systemic analysis, and empirical data, typically scientometrics, can also be added to the interpretation, offering quantitative empirical evidence to the structural qualitative description (Demeter, 2020). We argue that beyond the general consideration by which all societal realities can be interpreted in the field-theoretical framework based on structural isomorphs, the similarities between the field of literature and academia are especially significant.

For example, in its historical process, in which it has achieved relative levels of autonomy and dependence, the literary field has been in constant tension with the fields of power that, to a certain extent, condition its operation. “According to Bourdieu’s analysis, the emergence of the literary field results from a historical process by which the literary activity became autonomous from different types of external constraints related to the conditions of production” (Sapiro, 2003, p. 441). There are fundamentally two external constraints: the State and the market. However, to understand the historical development of a field (literary or academic) and to gain relative levels of autonomy as a social space, one must consider “the influence of interrelations with other social fields, in particular, the political field, the field of power, the economic field” (Deer, 2014, p. 120). Then, both in the literary and scientific fields, the configuration of the positions of the agents (scholars or publishers, writers or thinkers, translators, or schools of thought) always takes place in the dialectical relationship of dominants and dominated. “The political struggle determines the antagonism between the *heretical* dissidents and the *orthodox* dominant agents (Sapiro, 2003: 446). Thus, we can see position-making according to political or economic constraints in cultural or intellectual production. As Foucault (1978: 95) says: “Where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power.”

While both the struggle for autonomy (as a struggle with external entities) and the struggle for field-specific power positions (as an internal struggle) are characteristic of all

societal fields, the type of agents, capital, and habitus are the most similar in the case of literature and science. For instance, as mentioned before, the main agents are the authors and the publishers in both the academic and literary fields. More drastically speaking, from a field-theoretic point of view, neither in academia nor in literature is it possible to be an author without being published; thus, publishers have almost infinite power in the field. Being published is the price of entry in both fields, publications are the currency of the authors who cannot be analysed or interpreted without their publications. Another similarity lies in the role of the market and politics, as publications need to be financed in both fields, so authors require the support of either the state or the market without sacrificing their autonomy. However, when the publishing activity is driven by pure economic interest, the constraints towards both academic and literary fields are explicit. Scholars and writers either subscribe, resist, or escape that power relationship, and indeed, the outputs suffer changes, and publishers can use translators for those purposes when the exchange is international. With reference to capital, education and language are crucial in both fields, and we must emphasise that, despite the growing significance of multimedia platforms, written publications are still the most important currencies in both academia and literature.

While the field-specific similarities between the two fields are striking, there are obvious differences between them. The most important difference is that science, according to its self-definition, is somehow independent of scientists in the sense that the scientist, as a person, is of less significance (or is even totally unimportant). This is reflected in its most dramatic form in the double-blind peer review, where reviewers do not know the author's name and focus solely on the text. The impersonality of academic work is also manifested in the fact that scientists should always reflect on the work of other scientists; thus, they should justify their contribution with the findings of other scientists. This is far from the norms of the literary field where, generally, creativity and authenticity are of crucial importance. Moreover, continuous reflection on reality, empirics, and objectivity are amongst the most crucial norms in science; literature is quite different from this point of view, too. Finally, in their writings scientists typically address other scientists in their field, and so-called science communication, that is, writing for a general audience, is less important than publications targeting the academic community. By contrast, authors in the field of literature do not usually write for other authors, but for an audience that, of course, can vary from one author to another, but is in any case not identical with the community of other authors. To be popular, authors in the literary field need as many readers as possible, which is not characteristic in academia – one can become a scientific Nobel Prize winner without being known beyond a specific and sometimes extremely narrow academic community.

Based on the aforementioned issues, the similarities and differences between the two fields should be taken into account in the implementation. Thus, there will be differences between narrative bibliometrics and narrative literaturemetrics. However, through the fundamental considerations of narrative bibliometrics, our narrative literaturemetrics aims to provide an analysis supported by huge empirical data and transparent methodology but one that still reflects our subject's social and historical reality. This approach contains qualitative and quantitative elements, which differ from

them in many senses. First, our approach is mixed since we apply large-scale quantitative data, historical evidence, and analysis of preceding studies. This is more than standard quantitative analyses usually provides, as, for instance, the interpretation of the data differs across the analysed periods, locations, and genres. As discussed earlier, and this is one of the most important considerations behind narrative bibliometrics, the same type of data should be interpreted differently in different cultural, linguistic, and historical contexts that produce the field through different agencies and power relations. In other words, we use data for theorisation. However, qualitative data and quantitative, mostly descriptive statistical analyses are the only sources contributing to the development of our theoretical interpretation.

Regarding the distinction between our literaturemetrics and standard qualitative analyses, in qualitative content analysis, in the case of narrative bibliometrics, researchers aim to build their interpretation on the unique database they have developed from different sources. For instance, they can provide statistics for publication records, language and geographical distribution, genre distribution, and reception metrics. These are all variables beyond the usual content analysis that focuses mainly on the produced texts. One might wonder why we call it literaturemetrics instead of statistical or mixed-method analysis. Our answer is straightforward because in order to justify it, it is enough to refer to a related approach, namely scientometrics. Scientometrics analyses various forms of science production using specific, science-related variables. It is a kind of statistical analysis, but its scope is specifically scientific, and accordingly, the measurements and variables are interpreted in the field of science. The same holds for literaturemetrics since – in Bourdieusian terms – its measurements relate to the field of literature with its specific objects of production, agencies and power relations that can be measured by various, literature-related metrics, as the field of science can be measured by specific, science-related metrics.

Conclusion: A tentative categorisation scheme for narrative literaturemetrics

In this paper, we have provided a prolegomena for any research that aims to apply the basics of *narrative literaturemetrics*. We have argued that scientometric research and the field-theoretic analysis of academia have been developing for a long time and with fierce scholarly debate. We have demonstrated that the most nuanced contemporary method seems to be narrative bibliometrics, which is aware of both the shortcomings and the advantages of qualitative/quantitative approaches and aims to combine their most beneficial parts. Our *narrative literaturemetrics* makes a further step forward by arguing that, while *narrative literaturemetrics* should be conducted as an empirically underpinned qualitative analysis that interprets empirical data in the particular context of the analysed field, it also requires firm theorisation in which the interpretation takes place. Our position is to use a wide variety of empirical data within a theoretical framework considering field-theoretic and world-systemic attributes (as shown in Table 1). Beyond improving the methodology of narrative bibliometrics, this approach

can be the foundation of *narrative literaturemetrics*, a unique technique for analysing the field of literature. At the end of this prolegomena, we provide some possible variables for analysing the literature field that are borrowed from the analysis of academia (Table 2). However, future researchers should remember that the most important thing is the approach and not the precise variables as, on the one hand, it is impossible to use all of them in any single analysis and, on the other hand, new variables can always occur with technical, cultural and other systemic development of the literature field, and also with the theoretical development of our *narrative literaturemetrics* itself.

Table 2: Characteristics and measurements for orthodox and heterodox agents in literature

Agents	Orthodox	Heterodox	Measurements	Variable
Individual				
Writers	Working with elite publishers	Working with peripheral publishers	Publisher position in the field	Ordinal
	Educated at elite universities	Educated at the periphery	University position on prestige rankings	Ordinal
	Senior writers (already famous)	Junior writers (relatively unknown)	Artistic seniority, expressed in position on different rankings (both marketing and professional)	Ordinal
	Highly productive	Less productive	Publication count	Continuous
	Prestigious publication	Publication in less visible outlets	Publisher prestige	Ordinal Continuous (normalised)
	Highly cited (altmetrics)	Rarely cited (altmetrics)	Citation count (altmetrics)	Continuous, weighted, normalised
	Occupy gatekeeping positions	Lack gatekeeping positions	Positions with prestige hierarchies in the literary field	Nominal
	Over-represented in committees, associations, boards	Under-represented in committees, associations, boards	Positions with prestige hierarchies	Nominal
	Star positions in literature networks	Peripheral positions or distracted from literature networks	Central network positions	Continuous (network properties)
	Translated into many languages	Publishing in their own language	Translation network	Continuous (network properties)
	Published many times	Published limited times	Number of editions	Continuous
	Excellent sale	Limited sale	Sales (number of copies)	Continuous
High fame	Low fame	Media representation	Nominal	
Collective				
Committees, Associations, Boards	Over-represented	Under-represented	Membership, power position	Nominal
Literature schools	Highly productive	Less productive	Publication count	Continuous
	Prestigious publication	Publication in less visible outlets	Publisher prestige	Ordinal Continuous (normalised)
	Highly cited	Rarely cited	Citation count (altmetrics)	Continuous
	High positions on different rankings	Lower positions or not listed on different rankings	Ranking positions on different rankings (marketing and professional)	Ordinal

Agents	Orthodox	Heterodox	Measurements	Variable
Institutional				
Language	Academic English	Language other than English	Interlingua position English International Regional National	Nominal
Genre	Book	Other genre	Genre	Nominal
Associations	Established at the West	National character	National diversity	Nominal Continuous (Simpson)
	Having mainstream Western leadership	National leadership	National diversity	Nominal Continuous (Simpson)
	Organising conferences in English	Organising national conferences	National diversity	Nominal Continuous (Simpson)
Publishers	Publish in English	Publish in other than English languages	Interlingua position – English – International – Regional – National	Nominal
	International distribution	National distribution	National diversity and network of the distribution	Nominal Continuous (Simpson) Network properties
	Extensive marketing strategies	Weak marketing strategies	Publishing activity	Continuous Nominal
	Located in the West	Located at the periphery	Location (world-systemic)	Nominal
Nations	Western/Central countries of the Global North	Countries of the Global South and the Semi-Periphery	World-systemic positions	Nominal
World Regions	North America, Western Europe, Developed Asia	Developing Asia, Africa, the Middle East, Eastern Europe, Latin America	World-systemic positions	Nominal

Source: Compiled by the author.

References

- Aguillo, I. F. (2022). Bibliometría sofisticada [Sophisticated Bibliometrics]. *Anuario ThinkEPI*, 16. Online: <https://doi.org/10.3145/thinkepi.2022.e16e28>
- Assimakis, N. & Adam, M. (2010). A New Author's Productivity Index: P-index. *Scientometrics*, 85(2), 415–427. Online: <https://doi.org/10.1007/s11192-010-0255-z>
- Baird, L. M. & Oppenheim, C. (1994). Do Citations Matter? *Journal of Information Science*, 20(1), 2–15. Online: <https://doi.org/10.1177/016555159402000102>
- Bajnok, A., Kriskó, E., Tari, A. & Demeter, M. (2022). Habitus Formation and Perceived Academic Norms of Hungarian Communication Scholars. *KOME: An International Journal of Pure Communication Inquiry*, 10(1), 59–79.
- Bauder, H., Hannah, C. A. & Lujan, O. (2017). International Experience in the Academic Field: Knowledge Production, Symbolic Capital, and Mobility Fetishism. *Population, Space and Place*, 23(6), 1–13. Online: <https://doi.org/10.1002/psp.2040>

- Bihari, A., Tripathi, S. & Deepak, A. (2023). A Review on H-index and Its Alternative Indices. *Journal of Information Science*, 49(3), 624–665. Online: <https://doi.org/10.1177/01655515211014478>
- Blasco, O., Demeter, M. & Goyanes, M. (2024). A Contribution-Based Indicator of Research Productivity: Theoretical Definition and Empirical Testing in the Field of Communication. *Online Information Review*, 48(4), 823–840. Online: <https://doi.org/10.1108/OIR-11-2022-0634>
- Bordignon, F., Chaignon, L. & Egret, E. (2023). Promoting Narrative CVs to Improve Research Evaluation? A Review of Opinion Pieces and Experiments. *Research Evaluation*, 32(2), 313–320. Online: <https://doi.org/10.1093/reseval/rvad013>
- Bourdieu, P. (1988). *Homo Academicus*. P. Collier (trans.). Polity.
- Bourdieu, P. (1996b). *The State 1. Elite Schools in the Field of Power*. L. C. Clough (trans.). Polity.
- Bourdieu, P. (1999a). *The Weight of the World. Social Suffering in Contemporary Society*. P. Parkhurst Ferguson, S. Emanuel, J. Johnson, Sh. T. Waryn (trans.). Stanford University Press.
- Bourdieu, P. (2004). *Science of Science and Reflexivity*. R. Nice (trans.). Polity.
- Bornmann, L. & Daniel, H. D. (2007). What Do We Know about the *h* Index? *Journal of the American Society for Information Science and Technology*, 58(9), 1381–1385. Online: <https://doi.org/10.1002/asi.20609>
- Bornmann, L. & Mutz, R. (2015). Growth Rates of Modern Science: A Bibliometric Analysis Based on the Number of Publications and Cited References. *Journal of the Association for Information Science and Technology*, 66(11), 2215–2222. Online: <https://doi.org/10.1002/asi.23329>
- Burris, V. (2004). The Academic Caste System: Prestige Hierarchies in PhD Exchange Networks. *American Sociological Review*, 69(2), 239–264. Online: <https://doi.org/10.1177/000312240406900205>
- Callaham, M., Wears, R. L. & Weber, E. (2002). Journal Prestige, Publication Bias, and Other Characteristics Associated with Citation of Published Studies in Peer-Reviewed Journals. *Jama*, 287(21), 2847–2850. Online: <https://doi.org/10.1001/jama.287.21.2847>
- Canagarajah, A. S. (2002). *A Geopolitics of Academic Writing*. University of Pittsburgh Press.
- Crossley, N. (2004). On Systematically Distorted Communication: Bourdieu and the Socio-Analysis of Publics. *The Sociological Review*, 52(Suppl. 1), 88–112. Online: <https://doi.org/10.1111/j.1467-954X.2004.00475.x>
- Deardorff, D. K. & van Gaalen, A. (2023). Assessing Internationalization Outcomes. In D. K. Deardorff, H. de Wit, B. Leask & H. Charles (Eds.), *The Handbook of International Higher Education* (pp. 147–164). Routledge.
- Deer, C. (2014). Doxa. In M. Grenfell (Ed.), *Pierre Bourdieu. Key Concepts*. Routledge.
- Demeter, M. (2018). Theorizing International Inequalities in Communication and Media Studies. A Field Theory Approach. *KOME: An International Journal of Pure Communication Inquiry*, 6(2), 92–110.
- Demeter, M. (2019). The World-Systemic Dynamics of Knowledge Production: The Distribution of Transnational Academic Capital in the Social Sciences. *Journal of World-Systems Research*, 25(1), 111–144. Online: <https://doi.org/10.5195/JWSR.2019.887>
- Demeter, M. (2020). *Academic Knowledge Production and the Global South. Questioning Inequality and Under-representation*. Cham: Palgrave Macmillan. Online: <https://doi.org/10.1007/978-3-030-52701-3>
- Fang, Z., Costas, R., Tian, W., Wang, X. & Wouters, P. (2021). How is Science Clicked on Twitter? Click Metrics for Bitly Short Links to Scientific Publications. *Journal of the Association for Information Science and Technology*, 72, 918–932. Online: <https://doi.org/10.1002/asi.24458>
- Ferrare, J. J. & Apple, M. W. (2015). Field Theory and Educational Practice: Bourdieu and the Pedagogic Qualities of Local Field Positions in Educational Contexts. *Cambridge Journal of Education*, 45(1), 43–59. Online: <https://doi.org/10.1080/0305764X.2014.988682>
- Foucault, M. (1978). *The History of Sexuality. Vol. 1: An Introduction*. R. Hurley. (trans.). Pantheon.

- Goyanes, M. & Demeter, M. (2021). Dr. Excellent: The Systemic and Personal Conditions for Being an Academic Star in Communication Studies. *KOME: An International Journal of Pure Communication Inquiry*, 9(2), 65–80. Online: <https://doi.org/10.17646/KOME.75672.64>
- Goyanes, M., Demeter, M., Grane, A., Toth, T. & de Zúñiga, H. G. (2023). Research Patterns in Communication (2009–2019): Testing Female Representation and Productivity Differences, within the Most Cited Authors and the Field. *Scientometrics*, 128(1), 137–156. Online: <https://doi.org/10.1007/s11192-022-04575-4>
- Glänzel, W. & Thijs, B. (2004). The Influence of Author Self-Citations on Bibliometric Macro Indicators. *Scientometrics*, 59(3), 281–310. Online: <https://doi.org/10.1023/B:SCIE.0000018535.99885.e9>
- Grenfell, M. (2014). Interest. In M. Grenfell (Ed.), *Pierre Bourdieu. Key Concepts*. Routledge.
- Hadas, M. (2021). *Outlines of a Theory of Plural Habitus: Bourdieu Revisited*. Routledge.
- Hagen, N. T. (2010). Harmonic Publication and Citation Counting: Sharing Authorship Credit Equitably – not Equally, Geometrically or Arithmetically. *Scientometrics*, 84(3), 785–793. Online: <https://doi.org/10.1007/s11192-009-0129-4>
- Havas, Á. & Fáber, Á. (2020). A heteronóm akadémia felemelkedése az EU peremvidékein [The Rise of the Heteronomous Academy on the EU's Periphery]. *Replika*, (115), 131–140.
- He, Q., Chen, B., Pei, J., Qiu, B., Mitra, P. & Giles, L. (2009). Detecting Topic Evolution in Scientific Literature: How can Citations Help? *Proceedings of the 18th ACM Conference on Information and Knowledge Management*, 957–966. Online: <https://doi.org/10.1145/1645953.1646076>
- Heilbron, J., Sora, G. & Boncourt, T. (2018). *The Social and Human Sciences in Global Power Relations*. Palgrave Macmillan.
- Hilgers, M. & Mangez, E. (2015). *Bourdieu's Theory of Social Fields. Concepts and Applications*. Routledge.
- Horányi, Ö. ed. (2007). *A kommunikáció mint participáció [Communication as Participation]*. Typotex.
- Hunter, L. (2004). Bourdieu and the Social Space of the PE Class: Reproduction of Doxa through Practice. *Sport, Education and Society*, 9(2), 175–192.
- Johnes, J. (2018). University Rankings: What Do They Really Show? *Scientometrics*, 115(1), 585–606. Online: <https://doi.org/10.1007/s11192-018-2666-1>
- Kaur, J., Hoang, D. T., Sun, X., Possamai, L., JafariAsbagh, M., Patil, S. & Menczer, F. (2012). Scholarometer: A Social Framework for Analyzing Impact across Disciplines. *PLoS ONE*, 7(9). Online: <https://doi.org/10.1371/journal.pone.0043235>
- Kuhn, T. S. (1997). *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.
- Kwiek, M. (2012). *Knowledge Production in European Universities: States, Markets, and Academic Entrepreneurialism*. Peter Lang.
- Larivière, V. & Costas, R. (2016). How Many is Too Many? On the Relationship between Research Productivity and Impact. *PLOS ONE*, 11(9). Online: <https://doi.org/10.1371/journal.pone.0162709>
- Labinger, J. A. (2023). *Connecting Literature and Science*. Routledge. Online: <https://doi.org/10.4324/9781003197188>
- Lauf, E. (2005). National Diversity of Major International Journals in the Field of Communication. *Journal of Communication*, 55(1), 19–151. Online: <https://doi.org/10.1111/j.1460-2466.2005.tb02663.x>
- Leung, M. W. H. (2013). 'Read Ten Thousand Books, Walk Ten Thousand Miles': Geographical Mobility and Capital Accumulation among Chinese Scholars. *Transactions of the Institute of British Geographers*, 38(2), 311–324. Online: <https://doi.org/10.1111/j.1475-5661.2012.00526.x>
- Liu, F., Hu, G., Tang, L. & Liu, W. (2018). The Penalty of Containing More non-English Articles. *Scientometrics*, 114(1), 359–366. Online: <https://doi.org/10.1007/s11192-017-2577-6>

- Miranda, R. & Garcia-Carpintero, E. (2019). Comparison of the Share of Documents and Citations from Different Quartile Journals in 25 Research Areas. *Scientometrics*, 121(1), 479–501. Online: <https://doi.org/10.1007/s11192-019-03210-z>
- Muñoz-García, A. L. (2019). Intellectual Endogamy in the University: The Neoliberal Regulation of Academic Work. *Learning and Teaching*, 12(2), 24–43. Online: <https://doi.org/10.3167/latiss.2019.120203>
- Moed, H. F., Burger, W. J. M., Frankfort, J. G. & van Raan, A. F. J. (1985). The Use of Bibliometric Data for the Measurement of University Research Performance. *Research Policy*, 14(3), 131–149. Online: [https://doi.org/10.1016/0048-7333\(85\)90012-5](https://doi.org/10.1016/0048-7333(85)90012-5)
- Newman, M. E. (2001). The Structure of Scientific Collaboration Networks. *Proceedings of the National Academy of Sciences*, 98(2), 404–409. Online: <https://doi.org/10.1073/pnas.98.2.404>
- Oshima, A. & Hogue, A. (2007). *Introduction to Academic Writing*. Pearson/Longman.
- Pan, R. K., Kaski, K. & Fortunato, S. (2012). World Citation and Collaboration Networks: Uncovering the Role of Geography in Science. *Scientific Reports*, 2(1), 902. Online: <https://doi.org/10.1038/srep00902>
- Parchomovsky, G. (2000). Publish or Perish. *Michigan Law Review*, 98(4), 926–952.
- Pérez Esparrells, C., Bautista-Puig, N. & Orduña-Malea, E. (2022). La evaluación pública de la investigación científica en el contexto internacional: Posibilidades y límites [Public Evaluation of Scientific Research in the International Context: Possibilities and Limits]. *Informe I* [Report]. Online: <https://repositorio.uam.es/handle/10486/705530>
- Pietrucha, J. (2018). Country-Specific Determinants of World University Rankings. *Scientometrics*, 114, 1129–1139. Online: <https://doi.org/10.1007/s11192-017-2634-1>
- Priem, J., Taraborelli, D., Groth, P. & Neylon, C. (2010). Altmetrics: A Manifesto. *Altmetrics*. Online: <http://altmetrics.org/manifesto/>
- Rajkó, A., Herendy, C., Goyanes, M. & Demeter, M. (2023). The Matilda Effect in Communication Research: The Effects of Gender and Geography on Usage and Citations across 11 Countries. *Communication Research*, 0(0). Online: <https://doi.org/10.1177/00936502221124389>
- Recke, R. (2011). Converging Principles of Norm, Rule, and Practice: Tracing Normativity beyond Semantics in Bourdieu's Outline of a Theory of Practice. *Res Cogitans*, 2, 167–192.
- Rothenberger, L. T., Auer, C. & Pratt, C. B. (2017). Theoretical Approaches to Normativity in Communication Research. *Communication Theory*, 27(2), 176–201.
- Rustin, M. (2016). The Neoliberal University and Its Alternatives. *Soundings*, 63(63), 147–176. Online: <https://doi.org/10.3898/136266216819377057>
- Sapiro, G. (2003). The Literary Field between the State and the Market. *Poetics*, 31(5–6), 441–464. Online: <https://doi.org/10.1016/j.poetic.2003.09.001>
- Sapiro, G. (2020). The Transnational Literary Field between (Inter)-nationalism and Cosmopolitanism. *Journal of World Literature*, 5(4), 481–504. Online: <https://doi.org/10.1163/24056480-00504002>
- Sapiro, G., Santoro, M. & Baert, P. eds. (2020). *Ideas on the Move in the Social Sciences and Humanities. The International Circulation of Paradigms and Theorists*. Socio-Historical Studies of the Social and Human Sciences. Cham: Palgrave Macmillan.
- Savage, J. D. (2000). *Funding Science in America: Congress, Universities, and the Politics of the Academic Pork Barrel*. Cambridge University Press.
- Sedighi, M. (2020). Evaluating the Impact of Research Using the Altmetrics Approach (Case Study: The Field of Scientometrics). *Global Knowledge, Memory and Communication*, 69(4–5), 241–252. Online: <https://doi.org/10.1108/GKMC-02-2019-0013>
- Schmitt, N. (2012). *The Oxford Handbook of Personnel Assessment and Selection*. Oxford University Press.

- SciVal (2021). *SciVal Usage and Patent Metrics Guidebook*. Elsevier. Online: <https://www.research.psu.edu/sites/default/files/SciVal%20User%20Guide.pdf>
- Stephen, T. D. (2011). A Methodology for Calculating Prestige Ranks of Academic Journals in Communication: A More Inclusive Alternative to Citation Metrics. *Behavioral & Social Sciences Librarian*, 30(2), 63–71. Online: <https://doi.org/10.1080/01639269.2011.565404>
- Sugiharto, S. (2021). De-Westernizing Hegemonic Knowledge in Global Academic Publishing: Toward a Politics of Locality. *Journal of Multicultural Discourses*, 16(4), 321–333. Online: <https://doi.org/10.1080/17447143.2021.2017442>
- Tahamtan, I., Safipour Afshar, A. & Ahamdzadeh, K. (2016). Factors Affecting Number of Citations: A Comprehensive Review of the Literature. *Scientometrics*, 107, 1195–1225. Online: <https://doi.org/10.1007/s11192-016-1889-2>
- Thatcher, J., Ingram, N., Burke, C. & Abrahams, J. (2016). *Bourdieu: The Next Generation. The Development of Bourdieu's Intellectual Heritage in Contemporary UK Sociology*. Routledge.
- Tomlinson, G. & Freeman, S. (2018). Who Really Selected you? Insights into Faculty Selection Processes in Top-Ranked Higher Education Graduate Programmes. *Journal of Further and Higher Education*, 42(6), 855–867. Online: <https://doi.org/10.1080/0309877X.2017.1323192>
- Torres-Salinas, D., Arroyo-Machado, W. & Robinson-García, N. (2023). Bibliometric Denialism. *Scientometrics*, 128, 5357–5359. Online: <https://doi.org/10.1007/s11192-023-04787-2>
- Torres-Salinas, D., Orduña-Malea, E., Delgado-Vázquez, A. & Arroyo-Machado, W. (2024). *Fundamentos de Bibliometría Narrativa* [Fundamentals of Narrative Bibliometrics] (v.1). Zenodo. Online: <https://doi.org/10.5281/zenodo.10512837>
- Tóth, T., Demeter, M., Csuha, S. & Major, Z. B. (2024). When Career-Boosting is on the Line: Equity and Inequality in Grant Evaluation, Productivity, and the Educational Backgrounds of Marie Skłodowska-Curie Actions Individual Fellows in Social Sciences and Humanities. *Journal of Informetrics*, 18(2). Online: <https://doi.org/10.1016/j.joi.2024.101516>
- Wacquant, L. (2018). Bourdieu Comes to Town: Pertinence, Principles, Applications. *International Journal of Urban and Regional Research*, 42(1), 90–105. Online: <https://doi.org/10.1111/1468-2427.12535>
- Wiedemann, T. & Meyen, M. (2016). Internationalization through Americanization: The Expansion of the International Communication Association's Leadership to the World. *International Journal of Communication*, 10, 1489–1509.

This page intentionally left blank.