Sur les épaules de géants ? Les motifs de recours aux citations dans la recherche en management[1]

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Résumé :

Si les citations ont été établies en tant que norme scientifique de manière à étayer les propos tenus et à reconnaître la contribution de précédents auteurs, les travaux ont largement montré qu'elles sont souvent employées pour de tout autres motifs – influencer les évaluateurs, augmenter son propre taux de citation, faire preuve d'érudition, etc. Malgré la littérature qui s'est accumulée sur ce sujet, cependant, un cadre de synthèse manque toujours. L'objectif de cet article est donc de mettre en évidence les différents motifs de recours aux citations, en les illustrant par des exemples issus de la recherche en management. Nous proposons une typologie qui classifie ces motifs en quatre catégories : épistémique, rhétorique, symbolique et économique. Nous présentons ensuite les pratiques de citation associées en distinguant leur nature et leurs conséquences. Nous recensons finalement les implications de cette analyse, tant en matière de production scientifique qu'en matière d'évaluation de cette production.

Mots-clés : citations, épistémologie, influence scientifique, méthodologie, recherche en management

1 Cet article fait actuellement l'objet d'une soumission en revue.

On the shoulders of giants? Motives to cite in management research

INTRODUCTION

Citation, defined as the reference to previous works, is one of the norms of scientific writing (Merton, 1957). Its use has been established in order to support the assertions that are made and to offer some guarantees about their validity. It has also been institutionalized in order to acknowledge the contribution of past authors, these authors being, according to the famous metaphor, giants on whose shoulders the producers of new knowledge are standing (Merton, 1965).

Since the 1960s, however, research on citing behaviour has largely shown that citations are often employed for other motives (Garfield, 1965; Kaplan, 1965). Evidence indicates that, beyond their traditional epistemic role, citations may be adopted in order to influence reviewers, to increase citation rates, to show erudition, etc. (Bornmann and Daniel, 2008; Erikson and Erlandson, 2014). Management studies have long integrated these concerns and have shown that these various uses also exist in our discipline (Harzing, 2002; Golden-Biddle, Locke and Reay, 2006).

Despite the literature that has accumulated on this topic in management research as well as in other academic disciplines, however, there is currently no consensus regarding why scholars cite previous works. Papers examining this topic usually offer various lists of motives to cite, ranging from four to more than ten motives (e.g., Garfield, 1965; Bornmann and Daniel, 2008; Erikson and Erlandson, 2014; Tahamtan and Bornmann, 2019). The problem is that the emphasis has been mainly put on the enumeration of motives rather than on the elaboration of a comprehensive framework that may precisely account for them. As Aksnes, Langfeldt and Wouters recently stated, "*in spite of detailed studies of referencing behavior, there is no unified theory*" (2019, p. 6), while there has been recurring calls for such a theory of citation since the 1970s (Nicolaisen, 2007). Consequently, citation practices remain poorly understood, which is problematic as citations lie at the heart of scientific production and evaluation (Gingras, 2016).

The objective of this paper is thus to offer a framework that elicits the various motives to cite. More specifically, we first propose a typology that distinguishes and articulates four motives to cite, namely, an epistemic, a rhetorical, a symbolic, and an economic one. Second, through examples drawn from management research, we then present each of the associated citation practices by distinguishing between their nature and their consequences. In doing so, we aim to offer a more accurate and parsimonious presentation of this topic than those proposed in previous papers.

The paper is organized as follows. After a brief historical overview of citation as a norm of scientific writing, we expose the typology that we have elaborated in order to classify the various motives to cite. We then present each of the associated citation practices by distinguishing between their nature and their consequences. We finally inventory the subsequent implications of this analysis, both for scientific production and for the evaluation of this production.

1. CITATION AS A NORM OF SCIENTIFIC WRITING

The attribution of an intellectual work to its author is a concern that can be traced back to the Antiquity. In ancient Rome, crediting past authors was considered as a way to show them respect and to honour them (Long, 2001). In ancient Greece, writings from Aristotle show that he frequently made references to previous works, whether its own ones or those from other philosophers such as Plato, Homer, or Empedocles (Small, 2010). We can also find traces of such a practice in the Middle Ages, period during which the metaphor "Standing on the shoulders of giants" was forged by Bernard de Chartres (12th century) in order to highlight the importance to refer to past authors in order to elaborate new knowledge (Merton, 1965). During these two periods, however, authors were often cited without any precise reference to the sources, as they were supposed to be known by readers (Small, 2010). It should also be noted that the use of citations was not widespread and was not a commonly accepted standard (Nicolaisen, 2007).

It is not until the 16th century, and mostly the 17th century, that citations are progressively institutionalized (Nicolaisen, 2007; Small, 2010). It is indeed from this period that a scientific ethos progressively develops, characterized by the creation of scientific societies and journals. The priority in scientific discovery starts to be a matter of concern, and it becomes necessary to correctly attribute findings to their authors (Merton, 1957). With the growth of the size of scientific communities during the 19th century, citation practices are more and more formalized (Allen, Qin and Lancaster, 1994). The objective is to avoid confusions that may be associated with the multiplication of authors and publications.

This norm rapidly becomes a subject of study, with a first stream of research considering citations as an indicator of scientific influence (Bornmann and Daniel, 2008). As early as 1927, a first study thus employed citation counts in order to evaluate the impact of the research that was conducted (Gross and Gross, 1927). Because such counts represent accessible data, this idea is then largely adopted, and gives rise to numerous investigations aiming at identifying epistemic trajectories on the basis of citations.

In the 1960s, however, a second stream of research starts to question this approach (Garfield, 1965; Kaplan, 1965). Evidence indeed shows that the use of citations is not always motivated by epistemic concerns, and that they may be instrumentalized for other motives. What are the different motives to cite? That is the question that we seek to address in the following.

2. MOTIVES TO CITE IN MANAGEMENT RESEARCH: A TYPOLOGY

Our inventory of the motives to use citations is based on a typology that we have elaborated. Here we present the methodology we have adopted to build it, then the typology itself.

2.1. METHODOLOGY

To survey a given topic, the most common approach is the systematic review. It aims to 1) collect all the papers that have been published on the topic – preferably in top-tier journals –, 2) identify the core concepts that are employed in these papers – often by coding –, and 3) interpret the key dimensions that emerge from this analysis (Alvesson and Sandberg, 2020). While such systematic reviews have already been conducted on citation motives (Bornmann and Daniel, 2008; Tahamtan and Bornmann, 2019), however, they have not been fruitful as a comprehensive framework that elicits these motives is still lacking.

As a consequence, we have adopted another methodology, called the problematizing review – which is in the vein of the traditional narrative reviews. Theorized by Alvesson and Sandberg, its objective is to "*re-evaluate existing understandings of phenomena, with a particular view to challenging and reimagining our current ways of thinking about them*"

(Alvesson and Sandberg, 2020, p. 1297). To do so, as Alvesson and Sandberg indicate: "*Rather than undertaking a surface reading of a large volume of available studies, a deep reading of the foundational texts, and of a moderate number of representative texts of a field, enables the author to better identify, articulate and challenge problematic, taken-for-granted assumptions in a specific domain (...). The idea is, then, to read sufficiently to come up with potentially new insights for novel theorizing."* (2020, 1299–1300).

Following this reasoning, we thus started by reading a few papers that were offering synthesis of the literature on citation motives. While we have primarily considered papers published in management journals (e.g., Harzing, 2002; Golden-Biddle, Locke and Reay, 2006; Judge et al., 2007; Macdonald and Kam, 2010), in accordance with Alvesson and Sandberg (2020), we have also integrated papers from other disciplines that have particularly studied this topic in order to put the review domain into perspective (e.g., Garfield, 1965; Bornmann and Daniel, 2008; Erikson and Erlandson, 2014; Tahamtan and Bornmann, 2019). We then tried to identify the key motives that were evoked in these papers and to elaborate a typology accordingly. We finally extended our review up to about 200 documents[2] in order to challenge our typology, which appeared to correctly reflect the motives that were mentioned in the literature[3].

2.2. Presentation of the typology

The typology that we have elaborated elicits four main motives to cite in management research, namely, an epistemic, a symbolic, a rhetorical and an economic motive (Table 1). This typology is organized around two key dimensions.

2 References are available upon request. As we focused on English literature, future work might examine the validity of the proposed framework in other linguistic contexts.

3 Of course, this methodology is not without limitations, in particular because it strongly relies on researchers' interpretation of the data (Alvesson and Sandberg, 2020). But we believe that it is useful as it allows to take a fresh look at existing areas of investigation and thus to avoid box-thinking, which is an endemic problem in management studies (Alvesson and Sandberg, 2014).

Table 1. Motives to cite in management research: A typology[4]

		Type of motive	
		Scientific	**Extra-scientific**
Way citations are employed	**In order to acknowledge an influence**	Epistemic	Symbolic
	In order to exert an influence	Rhetorical	Economic

The first dimension relates to the type of motive that is at stake. Epistemic and rhetorical motives to cite are primarily scientific motives, as they aim to provide scientific grounds to assertions or to convince readers that these assertions are scientifically sound. On the contrary, symbolic and economic motives are primarily extra-scientific motives, as they respectively intend to produce a representation of one self or to get various retributions.

The second dimension distinguishes between the way citations are employed. On the one hand, when employed for an epistemic or a symbolic motive, citations are used in order to acknowledge an intellectual influence, whether to support assertions or to convey a particular image of one self. On the other hand, when employed for a rhetorical or an economic motive, citations are a mean to exert an influence, as they are intended to convince readers or to obtain retributions.

To be clear, we do not contend that the the four motives that we elicit are entirely new, as they have already been identified more or less explicitly in previous work – in particular, the rhetorical use of citations has already been coined by Gilbert (1977) or Cozzens (1989). Likewise, the distinction between scientific and non-scientific motives to cite has already been made by Bornman and Daniel (2008). Rather, what we claim to be new here is 1) the idea that these four motives are sufficient to encompass every citation practice and 2) the idea that these motives can be articulated in the typology that we propose.

4 While this typology elicits motives to cite in management research, it seems to be transposable to any other discipline. It should also be noted that this topology is similar to a typology we previously developed on a completely different topic – the defence of French management journals (Mandard, 2020).

3. MOTIVES TO CITE IN MANAGEMENT RESEARCH: A PRESENTATION

Here we present the various motives to cite in management research, by distinguishing between the nature and the consequences of the associated citation practices – which we synthesize in Table 2. It should be noted that, although they are analytically distinct, these motives are not mutually exclusive, as many of them may be at stake when a reference is made.

3.1. EPISTEMIC MOTIVE

Citation following an epistemic motive is the traditional motive to cite, which was institutionalized in the 19th century (Allen, Qin and Lancaster, 1994). This use of citations aims to indicate the contribution of past authors in order to support scientific assertions (Merton, 1957).

3.1.1. Nature of the citations

There are different kinds of citations according to this motive (Garfield, 1965; Erikson and Erlandson, 2014; Tahamtan and Bornmann, 2019). References to previous works can be made in a positive way, in order to defend an assertion theoretically, methodologically or empirically. References to previous works can also be made in order to criticize prior publications or to indicate shortcomings in these publications. Additionally, references can also support an argument only partially, as it is not always possible to find perfect support for a given assertion. For instance, analysing six articles randomly selected in top management journals and published between 2000 and 2003, Partington and Jenkins found that all of these kind of citations – whether positive or negative, and complete or partial – were present in those publications (2007).

Table 2 Motives to cite in management research: A presentation

Motive to cite	*Epistemic*	*Rhetorical*	*Symbolic*	*Economic*
Definition of the motive to cite	Epistemic citations aim to indicate the contribution of past authors	Rhetorical citations aim to make an impression on readers	Symbolic citations aim to produce a representation of the researcher	Economic citations aim to provide retributions to the researcher
Nature of the citations	● Contributions can be indicated in a positive or negative, and in a complete or partial way ● Contributions are often subject to interpretation, as authors' thinking may be complex and ambiguous	● Impressions can be induced by the properties of citations (author, year, journal, etc.) ● Impressions can also be induced by the quantity of citations	● Representations can be induced by the properties of citations (author, year, journal, etc.) ● Representations can also be induced by the quantity of citations	● Retributions can be obtained through self or reciprocal citations ● Retributions can also be obtained through the citation of one stakeholders' work
Consequences of the citations	● Citations allow to identify the importance of contributions (of papers, scholars, journals, etc.) ● Citations also inform us about the origin and the evolution of research areas over time	● Citations allow the ideas that are developed to be considered as more valid ● Citations may become routinely employed without further considerations for their content	● Citations may confer legitimacy to their authors ● Citations also allow to build citation profiles	● Self and reciprocal citations allow researchers to increase their citation rates and to obtain various retributions (recruitment, tenure, teaching load, etc.) ● Citations of one stakeholders' work can also increase articles' acceptance rate
Representative papers	Anderson (2006), Garfield (1955), Merton (1957), Mingers and Leydesdorff (2015), Podsakoff, MacKenzie, Podsakoff and Bachrach (2008)	Cozzens (1989), Gilbert (1977), Judge, Cable, Colbert and Rynes (2007), Merton (1968), Milojević (2012)	Allen (1997), Breeze (2015), Cronin and Shaw (2002), Kapseon (2004), White (2001, 2004)	Bedeian (2003), Macdonald and Kam (2010), Nicolaisen (2007), Smith (2006), Szomszor, Pendlebury and Adams (2020)

Of course, references do not always back up an argument in an univocal manner (Anderson, 2006). Because the thinking of authors may be complex and ambiguous, their work may be subject to interpretation. As March puts in a presentation of the reception of the influential book 'A behavioral theory of the firm' he wrote with Cyert, "*in a world of thousands of citations, the authors' interpretations are only a small part of the story. What the ideas in* A Behavioral Theory of the Firm *might be imagined to be was shaped by the articles that sought to use them.*" (2007, p. 540). An exegesis is thus sometimes needed to shed light on the thinking of important authors in order to avoid erroneous understandings of their work and to make appropriate uses of it. Over time, commonly accepted interpretations may emerge, making the use of a reference easier (Anderson and Sun, 2010).

3.1.2. Consequences of the citations

In the middle of the 20th century, citation measure led to the emergence of a new discipline intended to quantify scientific literature, labelled scientometrics (Mingers and Leydesdorff, 2015). Its development is in particular the consequence of the creation of a database for inventorying citations, the *Science Citation Index,* by Garfield in the 1950s (Garfield, 1955). While originally elaborated as a tool aiming at determining which journal to include in libraries, this index has progressively become a device for quantitative evaluations of scientific production and has paved the way for the subsequent creation of several other databases (Mingers and Leydesdorff, 2015)[5].

On the one hand, citations allow to identify the contribution of papers, scholars or journals (Mingers and Leydesdorff, 2015)[6]. For instance, the study of articles published in business and management education research between 1970 and 2014 showed that Goshal's article entitled *Bad management theories are destroying good management practices* (2005) was the most influential paper published on this topic during this period (Arbaugh and Hwang, 2015). In a similar manner, the examination of scholarly influence in the field of management between 1981 and 2004 revealed that Kathleen Eisenhardt, Donald Hambrick and Charles O'Reilly were the three most cited researchers during this period (Podsakoff *et al.*, 2008). In the same vein, the study of citations in and citations from the *Strategic*

5 The presentation of the various metrics that may be employed to quantify scientific research is beyond the scope of this paper. For an overview of this topic, see Mingers and Leydesdorff (2015).

6 The excessive focus on citations in order to evaluate contributions has been largely criticized. We examine this issue in the discussion part.

Management Journal between 1980 and 2009 showed that this outlet progressively became an influential source of knowledge in this field of research (Nerur, Rasheed and Pandey, 2016).

On the other hand, citations also inform us about the origin and the evolution of research areas over time (Mingers and Leydesdorff, 2015; Zupic and Čater, 2015). Through the analysis of intellectual trajectories, it is possible to distinguish between recent and mature fields of investigation and to highlight areas that have been little explored and those that have been largely examined. The analysis of citations from three major operations management journals between 1980 and 2006 thus reveals that this field of research has shifted from narrow tactical toward macro strategic topics over time (Pilkington and Meredith, 2009). Intellectual trajectories also allow the identification of connexions and ruptures between research domains. For example, the examination of cross-citations across social science disciplines indicates that, between 1998 and 2008, after being initially multidisciplinary, innovation research progressively became compartmentalized between management and economics (Shafique, 2013).

3.2. RHETORICAL MOTIVE

Citations can also be employed according to a rhetorical motive, that is, in order to convince readers (Gilbert, 1977; Cozzens, 1989). While citations for an epistemic motive aim to acknowledge the influence of prior publications on one's thinking, citations following a rhetorical motive intend to exert an influence on the judgement readers will bear on one's work.

3.2.1. Nature of the citations

Research in the sociology of science has largely shown that academic productions are shaped by social conventions aiming to define what is an acceptable scientific publication, such as clarity, logical rigour or pertinence to current research in the discipline (Chase, 1970). It appears that, as a key aspect of scientific writing, citation practices are also shaped by norms aiming to define what constitutes a credible reference (Gilbert, 1977; Cozzens, 1989). Of course, because academic disciplines may have different standards, there may be important variations in citation practices across fields of research. To employ sound citations, it is thus necessary to identify the expectations of the readers – editors, referees and, more generally, the scientific audience – to whom a text is addressed (Milojević, 2012).

The soundness of a citation can be related to its very content. Here, each part of a given reference – that is, the author, the journal, the text itself, or even the year of publication – can play a rhetorical role. First, it is possible to cite widely acknowledged authors. It is largely known that famous authors receive more citations than others as their work is perceived as being more valid than the research of unknown scholars – this is the so-called Matthew effect in science (Merton, 1968). In management studies in particular, several research have thus shown that renowned authors tend to get more citations (Hwang *et al.*, 2019)[7]. Second, it is possible to cite prestigious, that is, highly-ranked journals. Examining factors causing a management article to be cited in top management journals between 1990 and 2006, Judge et alii (2007) showed that the most important factor driving citations was the prestige of outlets in which references were published[8]. Conversely, conference papers and books chapters are generally considered to be less convincing references as they are easier to publish (Colquitt, 2013). Third, famous texts may be regularly cited as an accepted reference in order to illustrate a particular point. For instance, the analysis of citations to Walsh and Ungson's article *Organizational Memory* (Walsh and Ungson, 1991) indicates that this paper is commonly mentioned to evoke the use of history by organizations (Anderson, 2006). Finally, fourth, when selecting citations, the year of publication may also be at stake. From a general standpoint, evidence shows that new articles tend to be more cited than old ones, as their results are presumed to be more valid (Hwang *et al.*, 2019).

To convince readers, the quantity of citations also matters. Citations can be employed massively in order to stress the attention that a topic has previously received or to show that an argument is largely supported (Macdonald and Kam, 2010; Schulz and Nicolai, 2015). The abundance of citations is particularly important at the beginning of a paper, as references allow to set the problematic and to show the importance of the issue the paper seeks to address (Schulz and Nicolai, 2015). Overall, as a rule of thumb, a former editor of the *Journal of Management* suggested that 5-6 pages of references should be considered as a reasonable quantity in major journals, while the use of more references could cast doubt on their usefulness and alter readers' perception of the manuscript (Feldman, 2004).

7 Because of sexist discriminations, it is also known that men's work is considered as more valuable and frequently receives more citations than women's. Labelled the Matilda effect (Rossiter, 1993), this phenomenon also seems to be observed in management studies (Czarniawska and Sevón, 2018).

8 While initially employed at the individual level, the Matthew effect thus appear to also exist at the journal level (Drivas and Kremmydas, 2020).

3.2.2. Consequences of the citations

The consequences of rhetorical citations are twofold. On the one hand, the ideas that are developed may be considered as more valid and papers tend to have a more important acceptance rate when considered for publication (Macdonald and Kam, 2007). Because of the huge amount of submissions they receive and the impossibility to carefully review all of them, some journals editors as well as some reviewers indeed acknowledge that they take citations into account in order to accept or reject papers (Judge *et al.*, 2007; Macdonald, 2015). Besides a better acceptance rate, papers with sound citations also tend to have a more important citation rate as well, as they appear to be more robust (Macdonald and Kam, 2007).

On the other hand, references may become routinely employed without precisely elaborating on them. For instance, DiMaggio deplored that the paper he wrote with Powell on institutions has become a ritual citation to evoke organizational isomorphism (DiMaggio, 1995). Similarly, March and Simon's *Organizations* is frequently employed to name an example of a classic work without precisely drawing on it (Anderson and Lemken, 2019). References may even be employed erroneously, as Harzing showed in her examination of the literature related to expatriates, built on the persistent myth of high failure rates due to massive misquotations of foundational articles (1995). Because of these problems, papers are regularly published to denounce inappropriate interpretations of past work and to deliver a more acceptable presentation of them (e.g., Anderson, 2006; Anderson and Sun, 2010; Anderson and Lemken, 2019). Conversely, original citation practices may be discouraged. An analysis of citation practices of the top 20 authors who frequently published in top management journal over the period 1987-2006 showed that these authors mainly cited top journals and top authors, thus avoiding references that may be unfamiliar to referees or references that referees may consider as not robust (Macdonald and Kam, 2010).

3.3. Symbolic motive

When employed following a symbolic motive, citations aim to convey an image of one self (Allen, 1997; White, 2001). While rhetorical citations aim to influence the representation of the research that is conducted, citations according to a symbolic motive intend to produce a representation of the researcher him/herself.

3.3.1. Nature of the citations

An image can be induced by cited references in several ways. Similarly to rhetorical citations, the author or the journal may serve as a symbol (Allen, 1997). For instance, writings of Marx, Foucault or Habermas have largely influenced the development of critical management studies and are commonly invoked by members of this community (Hassard, Hogan and Rowlinson, 2001). In a similar manner, journals such as *Organization*, *Critical Perspectives on Accounting* or *Ephemera* are privileged outlets for scholars belonging to this community and are regularly cited by them (Adler, Forbes and Willmott, 2007). References to these authors or to these journals can thus both indicate an affiliation to the critical management studies community (Alvesson and Deetz, 2020).

Besides authors or journals, various other aspects of a reference may also convey meanings and act as symbols. The year of cited publications may indicate whether scholars belong to traditional schools of thinking or to avant-garde (Erikson and Erlandson, 2014). The language of cited publications may signal scholars' international openness (Kapseon, 2004). The discipline from which a reference originates may also communicate scholars' intellectual affinities (Cronin and Shaw, 2002). Finally, while abundant referencing may be employed to convince readers following a rhetorical rationale, it may also be employed to display erudition. The use of numerous citations may indeed be employed to indicate that authors master a vast knowledge area (White, 2004).

3.3.2. Consequences of the citations

As institutional theory has largely shown, displaying an affiliation to a particular community may have opposite effects (DiMaggio and Powell, 1983). By positioning themselves in particular schools of thought, scholars may increase their legitimacy, and the knowledge they produce gets more easily accepted by their epistemic community (Allen, 1997). Generally speaking, the display of symbols is particularly important when actors are not particularly recognized in a given field and thus lack of legitimacy – an issue that is particularly salient when actors are young or new to the field (Zott and Huy, 2007). The same rationale seems to apply when using symbolic citations: they are more likely employed by scholars who are not firmly established in a given epistemic community and who thus want to demonstrate that they are one of its members (Breeze, 2015). Conversely, it should be noted that, by cultivating their affiliation to a particular scientific community, scholars tend to exclude themselves from other communities and to receive less credit from their members (Breeze, 2015).

Since the early 2000s, a stream of research pertaining to scientometrics has emerged which aims to examine authors' citation profiles (Cronin and Shaw, 2002). The objective is to get a better understanding of the social dynamics of knowledge production. Citation profiles can be established at the author level, through the elicitation of the so-called citation identity (White, 2001). In management research, citation profiles have generally been established at the level of a research area. Several studies have thus examined the intellectual foundations of research fields, such as in accounting, finance, or family business (Chrisman *et al.*, 2010), or in information systems (Walsh and Kalika, 2018).

3.4. Economic motive

Finally, citations can also be driven by economic motives (Bedeian, 2003; Smith, 2006; Szomszor, Pendlebury and Adams, 2020). As citation counts are nowadays a key indicator of scientific contribution (Macdonald and Kam, 2010; Reinstein *et al.*, 2011), references to prior works may be made in order to get various retributions.

3.4.1. Nature of the citations

Two key citation strategies may be distinguished here. First, it is possible to cite its own work – a practice also known as self-citation – in order to obtain the gains that we will expose in the next section (Szomszor, Pendlebury and Adams, 2020). The study of citations obtained by papers published in top journals such as *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly*, *Journal of Applied Psychology* and *Strategic Management Journal* revealed that, between 1980 and 2010, about 19 % of them were self-citations (Walsh, 2011). In the same vein, it is also possible to cite colleagues and to form 'citation cartels', that is, to form networks of scholars who reciprocally cite each other (Smith, 2006; Szomszor, Pendlebury and Adams, 2020).

Second, one may also cite papers written by the editors and the reviewers of the journals in which articles are submitted, as well as papers that have been published in these outlets. A survey addressed to authors of articles published in the *Academy of Management Journal* and the *Academy of Management Review* between 1999 and 2001 showed that 20%

of these scholars included references because they expected to be reviewed by their authors (Bedeian, 2003).

3.4.2. Consequences of the citations

Various benefits may derive from economic citations. Self-citations may be implemented in order to directly increase researchers' own citation rate and to consequently obtain the various retributions that are commonly associated with high impact factors, such as recruitment, tenure, teaching load, career evolution, or retribution (Macdonald and Kam, 2010; Reinstein *et al.*, 2011; Szomszor, Pendlebury and Adams, 2020). They may also be employed to increase the visibility of one's work in order to be subsequently cited and to finally get these retributions (Szomszor, Pendlebury and Adams, 2020). The same rationale applies for reciprocal citations: they aim to increase researchers' citation rates and to reap the benefits we previously mentioned (Smith, 2006).

In addition, the citation of editors or reviewers in which articles are submitted may increase the chances of getting accepted. Apart from the fact that editors and reviewers may be more receptive to citations from papers they have written and to citations from papers that have been published in the journals they work for, which is a rhetoric motive to cite that we have previously exposed, they may be more sensitive to such citations as they allow them to increase their own impact factor or the impact factor of their journals (Walsh, 2011). When requested by the editors themselves, citations are called coercive citations. They occur when citations are requested by editors whereas 1) no references where actually lacking, 2) no specific references were suggested, 3) the only guidance provided was to add citations from the editor's journal (Wilhite and Fong, 2012).

Of course, instrumental citations are not without risks. When detected, instead of increasing their popularity, these practices may actually undermine the reputation of their authors and of the scholars they cite (Nicolaisen, 2007). A survey conducted a decade ago among researchers in economics, sociology, psychology and business showed that coercive citations were not uncommon in those disciplines (Wilhite and Fong, 2012). Following this survey, such a behaviour has been largely condemned as an academic misconduct that has to be stopped. Many journals have consequently established ethical codes of practice forbidding this kind of request (Martin, 2013). Likewise, since 2007, Thomson Reuters' Journal Citation Report no longer publishes metrics of journals that display excessive rates of self-citations and reciprocal citations – and some management journals have thus been suspended in the recent years (Honig *et al.*, 2018).

4. DISCUSSION: IMPLICATIONS FOR MANAGEMENT RESEARCH

In this section we discuss the implications of our previous developments for management research, both regarding scientific production and the evaluation of this production.

4.1. IMPLICATIONS FOR SCIENTIFIC PRODUCTION

First of all, this paper aims to remind us the epistemic vocation of citations and the importance to ensure that they are both relevant and accurate. To do so, Harzing proposed twelve guidelines for good academic referencing, which are (2002, p. 128): 1) reproduce the correct reference, 2) refer to the correct publication, 3) do not use 'empty' references, 4) use reliable sources, 5) use generalizable sources for generalized statements, 6) do not misrepresent the content of the reference, 7) make clear which statement references support, 8) check out the original, 9) do not cite out-of-date references, 10) do not be unduly impressed by top journals, 11) do not try to reason away conflicting evidence and 12) actively search for counter-evidence. While formulated almost 20 years ago, we believe, along with colleagues from management studies as well as from other disciplines (Colquitt, 2013; Smith and Banks, 2017; van de Weert and Stella, 2019), that these guidelines are still relevant and useful.

Second, this paper also stresses the importance of the rhetorical function of citations. Most of the time, this aspect is not formally taught but is experimented by scholars during their career: our paper thus sheds light on a rather informal practice. To be clear, we are not promoting the use of inappropriate references to mislead readers. Rather, we contend that, when selecting a reference among the various documents that may be cited in order to substantiate an assertion, scholars need to integrate a rhetorical dimension in their choice. The scientific competition is particularly fierce to be published, read, and ultimately cited. In line with Gilbert (1977) and Colquitt (2013), we believe that scholars have to be aware of this concern if they want to thrive on the academic landscape.

Finally, third, this paper sheds light on the symbolic dimension of citations. Even if they are not always perceived as such, references are symbols authors may use if they want to be perceived as members of a given academic community (Breeze, 2015). Scholars – and in particular young scholars – should also integrate this concern in their writing strategy.

4.2. Implications for scientific evaluation

With respect to implications for scientific evaluation, we will distinguish between implications regarding the evaluation of submitted papers and those regarding the evaluation of published papers.

4.2.1. Regarding the evaluation of submitted papers

First, this article stresses the importance to remain vigilant regarding the epistemic function of citations when evaluating papers, and to make sure that the references that are mentioned are accurate. Proper citation is currently an important concern for management journals (Lee, Méric and Altman, 2019). The objective is to avoid referencing errors or malpractices that may both mislead subsequent research and undermine the credibility of our academic community (Harzing, 2002). Generally speaking, studies examining the accuracy of references across disciplines reveal an error rate ranging from 25% to 50%, so it seems that we may have room for improvement here (Rivkin, 2020).

Second, it is also important to avoid to be too vulnerable to rhetoric citations, as they tend to induce standardized papers. On the contrary, we think that it is crucial to allow – and even to encourage – original citation practices in order to favour the emergence of novel knowledge. Management studies have been largely criticized for being pervaded by box-thinking research, and the openness to original citation practices appears to be a way to induce more box-breaking research (Alvesson and Sandberg, 2014). Such an openness to theoretical diversity is actually nowadays advocated by most management journal. For instance, this is an explicit requirement in the reviewer guidelines of the *Academy Meeting* of the *Academy of Management*, which states that evaluations have "*to be open-minded to different authors using different theoretical frameworks*" and should "*judge manuscripts based on how well they stimulate thinking and discussion*"[9].

Third, it is necessary to be impermeable to economic aspects and to refuse citations that are intended to obtain counterparts such as a positive evaluation of the paper or a positive appreciation of its authors. Similarly to erroneous citations, this kind of citation practice undermines the reputation of our research community and is increasingly denounced in academic publishing (Martin, 2013).

9 https://aom.org/events/annual-meeting/reviewing/reviewer-guidelines

4.2.2. Regarding the evaluation of published papers

Since the 1920s, citation counts have progressively become a key indicator of scientific influence (Gross and Gross, 1927; Gingras, 2016). Management studies are no exception, as they largely rely on them to identify prominent scholars (Aguinis *et al.*, 2014), top journals (Judge *et al.*, 2007), as well as major research centres (Starbuck, 2005). The problem here is that such an evaluation of published papers is guided by the assumption that citations reflect the epistemic importance of scholars' work. However, given what we know about the uses of citations, this indicator should be employed very cautiously as it may actually measure completely different phenomenons such as the rhetorical value of references or the institutional importance of their authors – and Garfield himself was well aware of this issue (Baum, 2011).

In order to avoid biases that may be introduced by purely quantitative analysis of citations, a method called citation context analysis has been introduced in the late 1970s (Small, 1980). As its name suggests, this approach involves the examination of passages where citations appear in order to determine the way previous texts are interpreted and influence subsequent works. In management studies, this method has been adopted to evaluate the true contribution of Walsh and Ungson's *Organizational memory* (Anderson and Sun, 2010) the real impact of March and Simon's *Organizations* (Anderson and Lemken, 2019), or the influence of Pierre Bourdieu in management and organization studies (Sieweke, 2014).

While citation context analysis is interesting as it allows a more accurate understanding of the information that is retrieved from a reference, its usefulness remain limited for two reasons (Tahamtan and Bornmann, 2019). On the one hand, the reading of a text does not always reveal the true motives to cite. For instance, the reading of sentences in which citations appear may not always allow to distinguish between rhetorical and symbolic motives, or to reveal that both of them are present. On the other hand, such a context analysis requires an in-depth knowledge of the research area to which the cited document belongs. Therefore, it may be necessary to go beyond the mere analysis of writings and to ask authors why they employed particular references in order to clarify their intentions (Harwood, 2009). Survey and interview-based studies have thus been conducted since the 1990s to elicit reasons to cite (Tahamtan and Bornmann, 2019). They have been employed in areas such as communication studies (Case and Higgins, 2000), computing and sociology (Harwood, 2009), or to understand the citing behaviour of post-graduate business management students (Harwood and Petrić, 2012). We think that it could also be adopted in management research in order to shed light on actual citation practices[10].

Of course, while these methods may be employed to identify true motives to cite and to ascertain the existence of an epistemic influence, research quality is a multidimensional concept that should not be reduced to such an influence (Aguinis *et al.*, 2014; Aksnes, Langfeldt and Wouters, 2019). In the past decade, various transdisciplinary initiatives such as the Leiden manifesto or the San Francisco Declaration on Research Assessment (DORA) have emerged in order to promote more pluralistic approaches to research evaluation. The objective is to evaluate publications not only on the basis of citation analysis, but also through the qualitative assessments of their scientific content and the examination of their impact on policy and practice. Such an impact is a particularly important concern in management studies, a discipline in which research implications for organizational practices are historically required (for a presentation of the multiple indicators that may be employed to measure scholarly impact in management, see Aguinis et al., 2014).

CONCLUSION

The idea that citations are employed for epistemic motives is strongly anchored, as evidenced by the presence of the sentence "On the shoulders of giants" on the home page of the popular Google Scholar search engine. Yet, publications on the topic show that this is not always the case, and that citations are regularly used for completely different reasons – namely, a rhetorical, a symbolic or an economic motive. Through this article, we hope to contribute to forge a more accurate representation of this subject and to offer a framework that may be useful to management scholars, both for scientific production and for the evaluation of this production.

Following our developments, the key avenues for subsequent investigations are threefold. First, future research could deepen our understanding of citation practices by examining their various antecedents. For instance, it is largely known that the physical or electronic availability of publications (Wang, Bu and Xu, 2018), the nature of the reward systems (Judge *et al.*, 2007) or the cultural context (Deschacht and Maes, 2017) have an

10 The main limitation of surveys and interviews studies is that authors may not remember why they have cited a particular article (Tahamtan and Bornmann, 2019). To overcome this problem, it is suggested to investigate recently published papers as authors are more likely to recall the motives that led them to cite.

influence on referencing. It could be interesting to take these parameters into account when studying motives to cite and their associated citation practices. Second, substitutions and complementarities between citation practices could also be examined. To what extend do rhetorical citations may substitute to epistemic citations? Are epistemic and symbolic citations complementary? To the best of our knowledge, this issue has been little considered: we think it deserves more attention. Finally, third, it could also be interesting to envision the networks of actors that are involved in citation practices – whether citing or being cited – and their respective connexions in order to highlight groups of interest and their objectives. To this end, the use of the actor-network theory (Latour, 2005) could be a fruitful avenue.

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