Cite as: Brabet, J.; Ozbilgin, M.; Yamak, S. (2021) Changing the rules of the game in academic publishing: three scenarios in the field of management research. *International Journal of Business Governance and Ethics*

Changing the rules of the game in academic publishing: three scenarios in the field of management research

Abstract
The field of academic publishing is under multiple pressures to transform as it suffers from crises of confidence partly due to the mass marketisation, deterioration of relevance and decline of collaborative scientific ethos that it has experienced. The paper offers a provocation based on a multilevel analysis of the present academic (business) model of knowledge production and dissemination, and its consequences. It then presents three alternative futuristic scenarios. The first one is based on a fully commercialized approach to publishing. The second scenario promotes an open science approach and the third one explores a complete overhaul of our current approach to management research. The paper has implications for governance of the field of publishing in management research into the future and aims to alert the actors in the sector to the vices of the mass marketisation of academic publishing.

Introduction
There is a crisis of confidence in the field of academic publishing, which is induced by mass marketisation that brought about deterioration of relevance, decline of the value of science as an open and collaboratively generated public good. In order to restore confidence, it is essential to regain the relevance of academic work to public good and to curb the exploitative nature of the academic publishing industry. There is an identity crisis which is often expressed, especially, by the young scholars who question the ethicality and relevance of academic research within the current publishing system and the value created by the latter. (Tourish, 2019; Grimes et al., 2018). These concerns feature in debates and initiatives that are organised by the European Academy of Management (EURAM), the International Federation of Scholarly Associations of Management (IFSAM) and Responsible Research in Business and Management Network (RRBM), and finally in the works of many scholars (e.g. Alvesson et al., 2017; Didegah and Gazni; 2011; Grimes et al., 2018; Huse, 2020; Tourish, 2019). For example, EURAM has formed a committee on changing the rules of the game to elaborate ways of overcoming the existing crisis in scholarship.

The sources of this crisis are manifold. The first part of this paper explores these sources from a multi-level perspective: At the macro level, we tackle the systemic issues such as the way commercial academic publishers exploit the voluntary labour of academics. Again, at the macro level, national public policies on academic publishing impose regulatory procedures for research evaluation which serve the interests of commercial academic publishers. At the meso level, we present the crises at the institutional level where the toxicity manifests as competition, commercialization, individualization and exposure to market economy. At the micro level, we explore issues of academic careers, reputations and identities as shaped by pressures to publish. The three levels, which are analysed in the paper, are intricately interrelated, as they constitute the ecosystem of academic publishing. Academic games are imbued with uneven power relations that we expose in the paper hoping to inform the actors of the detrimental consequences of such warped relations of power on the production of science (Bourdieu 1988; Greenhalgh et al. 2021). Our paper is provocative in nature to encourage the readers to have a

critical stance in assessing the current situation in academic publishing and to develop alternatives to overcome the existing problems. The paper has implications for governance of the field of academic publishing in management research into the future and aims to alert the actors (policy makers, scholars, university leaders, accreditation organisations, academic associations, and publishers) in the sector to the vices of the mass marketisation of academic publishing.

In the last part of the paper, we develop three different scenarios of change that could alter the way we play the publishing game in the field of management research. Drawing on Bourdieu and Wacquant (1992), when we refer to the publishing game, we do not use the term game in its cynical sense, as merely an instrumental game in the academic field. Instead, we illustrate in three scenarios the alternative routes that the games of meaning, ranking, career, knowledge, and power could dynamically evolve in the academic publishing game. We present the game as a game which has changed over time and the future of which is yet to be shaped by engaged scholars. The first scenario proposes an adaptation to the for-profit model where authors, reviewers, and editors get paid for their work by the publishers. In the second scenario the open access, open science movement promises are fully mobilized. The last scenario explores some profound changes in management research and education embedded in the socioeconomic model. Across these three scenarios we attend to the uneven nature of relations of power among actors in the field of academic publishing and propose some remedial interventions and call for further redress.

Macro, meso and micro level challenges: competition at the heart of the system

Macro Level Challenges

Academic publishing is a highly concentrated and profitable industry that predominantly serves commercial interests above and beyond ours as scholars and citizens. The publishing industry and its evolution are embedded in combined trends: the massification of higher education since World War II, on the one hand, globalization, privatization, financialization and competition as core (structuring) values in the post-Fordist era, on the other. Recent decades have witnessed the exponential growth of the number of university students internationally from roughly half a million in 1900 (Schofer & Meyer, 2005) to 216 million in 2016 and projected to grow to 594 million by 2040 (Calderon, 2018). At the same time as this expansion, inventive entrepreneurs such as Robert Maxwell were able to create and develop publishing companies that through mergers and acquisitions formed a contemporary oligopoly in the higher education sector's publishing arm. Elsevier is identified as the most dominant publisher in this oligopolistic setting, publishing almost quarter of all academic papers, closely followed by John Wiley and Springer (Didegah & Gazni, 2011). Today, the scientific and technical publishing industry is worth $10 billion and 44% of the market is shared by six companies (Research and Markets, 2020). Buranyi (2017) underlined the staggeringly profitable business of scientific publishing. For example, Elsevier's publishing had extracted in 2010 a 36% profit margin, higher than those of Apple, Google and Amazon (Nasdaq, 2018). Elsevier's 2019 revenues were up 3.9% to £2,637m compared to £2,538m in 2018, and adjusted operating profit was up 3% to £982m (Page, 2020). Publisher's profit margin is reported to be 37.1% in 2019 and 37% in 2018 (Page 2019). Elsevier revenues for 2020 were £2,692m, with primary research accounting for around half of revenues (RELX annual report 2020, p.14). In response to the exponential growth, May (2020) explains that the very lucrative commercial model of academic publishing will not be challenged by the open access system and early career researchers must help shape the future of the political economy of scientific publishing.

The oligopoly of the commercial publishing houses is basing the content of its journals on the work of academics, who release their intellectual property rights for free, and benefiting from the highly profitable sale of subscriptions for the journals to the very same academic institutions, whose scholars are authoring and reviewing the papers. In essence the commercial publishing sector acquires for free and sells at huge profit rates the academic papers back to academic institutions. Yet, the industry would not have succeeded in becoming one of the most profitable in the world if it had settled this business model without exploiting the growing competition between higher education institutions for reputation, public funding and student fees by fuelling the "publish or perish" frenzy. This frenzy imposes both an inflation of written articles and a scarcity resulting from a harsh selectivity (e.g., high rejection rates as high as 95% in the case of some journals, which serves as a criterion of scientific excellence (Alvesson and Sandberg, 2013). The Journal Impact Factor (JIF) became the main tool, alongside other subject specific and local listings of journal quality, for organizing the competition at every level of the research and higher education system while the oligopoly bought the journals with the highest JIF. The notorious JIF could be used as the perfect illustration of the non-neutrality of management tools and their embodiment of ideologies and power relationships. Despite its multiple and often recognized flaws, JIF has structured the ranking, funding, reorganizations, career, and rewards systems (Huse, 2020). Journal articles, in this new competitive order, have constituted the new currency of academic life. H-index, which provides a measure of both productivity in terms of numbers of outputs and citations for these outputs, is now widely used for measuring productivity and scholarly impact of individual academics. The H-index manifests as yet another metric for facilitating individualisation and careerism in academic publishing. Although such indices serve instrumental ends, we need to be wary of their limitations. For example, many scholarly papers could be heavily cited, not only because of their contribution but because other scholars dislike its premises and seek to falsify its assertions.

Digitalization, which was announced by some financial analysts in 2011 (Buranyi, 2017) to bring an end to the scientific publishing industry, did not deter the oligopoly from making huge profits, by adapting and expanding its provision in the digitalised academic publishing system. Today, Elsevier, one of the giants of this oligopoly, presents itself as a "global information analytics business specializing in science and health." and is selling its management services "SciVal" based on the data it gathers to public bodies and universities alike, thus driving the whole set of scientific policies. Elsevier also embraces open science with enthusiasm and offers, to us, scholars, non-voluntary data providers, free of charge, all the convenient and innovative infrastructure supporting the production and dissemination of science. Scientific policies are progressively driven by SciVal and thus subcontracted to very private interests. What become rather convoluted in this juncture are the distinctions between notions of commercial interests and open science.

The "publishing" (that we may have to rename very soon as the "scientific platforms") oligopoly is using the same resources and same strategies that allowed the giant internet companies, i.e. GAFAM (Google; Apple; Facebook; Amazon; and Microsoft) and BATX (Baidu, Alibaba, Tencent, Xiaomi) to dominate the world economy: Elsevier could buy all start-ups along the global value chain, for example SSRN (Social Science Research Network) or Mendeley. It created its own data basis (Scopus) and performance management tools (CiteScore) and thrives on data in order to become the indispensable infrastructure of science. Elsevier is part of the RELX group, which could be absorbed by GAFAM. In 2019, China Science Publishing & Media acquired EDP Sciences, which is a renowned French publisher.

At the global level of knowledge capitalism, such geopolitical moves are probably just beginning.

However, the major question "Is the staggeringly profitable business of scientific publishing bad for science?" (Buranyi, 2017) requires a very serious consideration. First, rising prices charged by the oligopoly are less and less bearable for shrinking public funds that get diverted from science production. Second, several direct drawbacks have been identified, mostly concerning "hard" science, which reinforces the demand for open science. Slowing the pace of science, for example, is identified as one of the detrimental outcomes. Worst, knowledge is kept hidden behind paywalls that hinder open science and disadvantage scientists from the less affluent institutions. Although these changes in scientific publishing business models have brought some reasoned resistance and responses, they continue to pose new challenges.

If we focus on management research, some specific issues are at stake in relation to the domination of publishing in journals with high impact factors, which are widely accepted now as key performance indicators. In the field of sciences, where symbolic capital is paramount, the ambition of management research to act as a "real" science dates from the Carnegie Corporation and Ford Foundation reports in 1959. The two reports, guided by legitimization by the industry, provoked a real disruption in business education and research (Carter, 1998). The temptation of mimicking experimental sciences coupled with the article format and the new fast science requirements have forbidden in-depth field research which involve longitudinal studies and lengthy presentation formats such as books. We shall see, when developing our third scenario, to what extent management research has been shaped by this environment.

Meso level challenges: the institutional transmission belt

As underlined by a study of Musselin (2018), comparing the global higher education institutions to the premier league soccer teams, major research universities have emerged after the publication of the Shanghai list, the competition among them becoming fiercer and their forms undergoing major transformations. A competitive position in an international ranking system now dictates the conditions of the political economy in universities, helping them secure high student fees, research income and structural and R&D investment. Different countries and institutions develop different strategies for joining and withdrawing from ranking systems. Ranking systems, accreditation systems and other charters, badges and pledges that academic institutions join present a complex setting which signals the global positioning of the academic institution vis a vis its approach to research, teaching and university administration. Once nation states and universities are locked into a particular international ranking system, there is little room for manoeuvre for individual academics in these universities. Individual academics are tacitly forced into complying with the logic of the international ranking system that the universities aspire to feature and compete. Some private firms, such as Elsevier's SciVal, are both producing rankings and counselling universities on how to obtain better positions in these ranking systems. International rankings are presenting a super structure which shapes the meso level operation of the academic publishing game.

Competition has changed the institutional landscape from professional organizations governed by scholars revendicating their academic freedom to organizations governed by a competition with numbers (Supiot, 2017) often respecting the New Public Management principles. The JIF was indeed the first number used to build reputation through rankings and accreditations responsible for allocation of resource and research funding to universities, and student fees, as well as for clustering of universities to generate better ranking scores and visibility. Services such as SciVal are providing more sophisticated devices to institutions. In turn, academic

hiring, careers, wages, bonus and grants heavily depend on performance measures that assign more value to the quantity of articles published in the top tier journals with most selective review systems. New possibilities to acquire doctoral degrees by publishing articles are extended to doctoral students. This is a symptom of the “publish or perish" imperative which now gets inculcated at the point of doctoral training. The pressure applied on young and old scholars alike to publish in top tier journals is supposed to nurture scientific excellence while the supposedly objective JIF and ranking systems provide the necessary tools for funding the better teams and promoting the best scholars. Yet this approach serves mainly to promote academic actors who may not specifically be interested, engaged, or involved in the field of management, but merely play the game for themselves. This control by “outputs” in contrast to the traditional control by “inputs” and socialization now prevail in management research and careers in the field. These changes derail the traditional focus of academic publishing from relevance to the field of management to generation of competitive yet meaningless outcomes.

The state of play among elite institutions is similar to a pyramid scheme, a system of fraud which feeds only the elite at the top through the voluntary contributions of the new and novice participants (Kamasak et al. 2020). Those who join the scheme have the expectation that they may, one day, move up to the higher echelons and benefit from the spoils of the system. The pyramid scheme of academic publishing rests on the assumption that all institutions and scholars, by participating in the competitive game of publishing, could secure careers and achieve success and visibility. This assumption allows for commercially interested publishing houses to use voluntary and free labour of authors, reviewers and editors and engage them in a competition by which they can use their academic product for free. Despite this illusion created by the pyramid scheme of academic publishing, ministries of science in industrialized countries, elite funding agencies and elite universities continue to define the parameters of excellence and performance in the field of management research and elsewhere in these competitive terms.

The micro level: *illusio of voluntarism and blind submission*

Pierre Bourdieu (2000) defined illusio as the blinding appeal of the game, to which once drawn in participants fail to develop a healthy critique of the rules of the game. There is an illusio effect at micro level among scholars, who recently joined the academic game. They tend to accept its established norms such as competition for publishing as legitimate and normal. Yet, as per all social and economic games, there is room for agency, i.e. for engaged actors to shed light to the uneven nature of power relations and to take remedial action through multilevel interventions. In the current publishing ecosystem, young academics are often not connected to the practice of management. Research is based on gaps rather than problematic or significant challenges that faces the world of work (Chevrier, 2014). There is a call from scholars (RRBM, 2017; Shapiro, 2017) to adopt holistic perspectives tackling real life problems instead of playing theoretical, incremental gap spotting game (Alvesson and Sandberg, 2013; Huse, 2020). Alvesson et al (2017) note that publishing an academic paper itself becomes the aim of writing papers, which means that academics are moving away from scholarly engagement and turning into technicians who produce papers. This leads to a “getting a paper published identity” (Huse, 2020). These competitive patterns create a chasm between scientific aims of generating meaning and competitive rationales of securing ranking and reputation (Ozbilgin 2009). Based on several studies (Miller and al., 2011; Lussier, 2014; Ozbilgin 2014) and our own observations, we identify 4 ideal types of academics distributed along 2 axes: the vertical axis of taste for science (or passion for research), the horizontal axis of level of being productive in the publishing game. The first type, passionate about research and very competent at publishing

in high-ranking journals, is that of the *winners*. The second type, who also publishes very widely but is not very personally interested in research, is framed as the *orthodox*. Among those who publish infrequently in high-ranking journals, there are also research enthusiasts, which we termed as the *heterodox*. In our final category, the scholars who have little interest in research and low levels of publishing, which we call as the *outsiders* (Table 1).

Table1: Four archetypes of scholars in terms of their passion for research and productivity

	High level of productivity in publishing in high-ranking journals	**Low level of productivity in publishing in high-ranking journals**
High level of passion for research	The winner - Game player - Game plotter	The heterodox - Resistant - Independent
Low level of passion for research	The orthodox - Top of the class - Thwarted academic	The outsider - Operational - Real outsider

Among the winners, some are very satisfied with the present state of the academic field; the game players with the heftiest symbolic capital and conform to the established order and have successful careers in elite institutions, publish in the elite journals and sit on boards of those journals. They enjoy strong networks and invest in research. They tend to support the rules of the game. Some other winners are critics vis-a-vis the system. The game plotters get the same benefits from the publishing game. Yet they may play not by but with the rules of the game, which they think are not good for science. In order to carry on research that they deem important and relevant, they bend the rules of the status quo. Some of the most renowned of them have been at the forefront of the fight against the publishing oligopoly. For example, Randy Schekman, a US biologist who won the 2013 Nobel prize wrote (2013) "I am a scientist. Mine is a professional world that achieves great things for humanity. But it is disfigured by inappropriate incentives. The prevailing structures of personal reputation and career advancement mean the biggest rewards often follow the flashiest work, not the best. Those of us who follow these incentives are being entirely rational – I have followed them myself – but we do not always best serve our profession's interests, let alone those of humanity and society." He refused to have the members of his lab publishing in the top tier journals. He was "a kid who loved science". He was also the first editor in chief of eLife, an open mega journal.

The *heterodox* are very involved in research but distance themselves from the rules of the game that they fight or ignore. Among them, the *resistant ones* create networks and mobilize either to protest or to innovate. The resistant ones are similar to, but less individualist than the *game plotters.* They are for example involved in building and defending open science, and collaborative and interdisciplinary research. For example, aerosol scientists have been termed as heterodox scientists in the fight against Coronavirus epidemic. Their findings which showed that Covid 19 is airborne have been dismissed by the scientific Orthodoxy. Yet they prevailed and resisted to get their evidence accepted eventually by the World Health Organisation as well as other national scientific bodies (Greenhalgh et al. 2021). The *independents*, among the

heterodox, are less inclined to collective action. They carry on their research without much effort to publish in high-ranking journals. The independents may ignore the whole reward system in academic publishing.

Those who publish well but without a real passion for science, we call the *orthodox*, who reap the benefits of the dominant system. Part of the orthodox archetype is the *top of the class*. Comfortable from the start in following the rules, they tend not to leave their comfort zone and still carry on authoring and publishing papers in line with the rules of the game. One colleague who plays the game as an Orthodox participant once told us "I am going to publish in the Academy of Management Review" and when we asked, "What will you publish there?", he answered: "I have yet no idea. I am analysing the journal in order to understand what they love to publish". So, in the case of the top of the class, performance of publishing trumps meaning. Some among orthodox are *thwarted academics*, whose passions in life and work lie outside the field of management research, but still perform well due to the elite status that they have achieved in academia. During conversations, thwarted orthodox would maintain that nobody would carry on doing "boring" research in business and management without the carrots and sticks provided by the actual rules of the game.

The *outsider type* consists of those scholars who publish less and have low levels of passion for research. Yet some, operational ones, may be very precious to the higher education institutions when they invest heavily in teaching, managing programs and other kinds of activities, which are indispensable to those institutions that the orthodox may consider as lowly activities because such scholarly activities beyond publishing do not contribute to their ranking and status. There are also the *real outsiders* who may invest their efforts in other industries, despite occupying academic posts. There is also a growing tendency to recruit industry experts as real outsiders, who lack academic training and scholarly rigour, as scholars among business and management schools.

The four ideal types of scholars we presented do not exist in pure form (Weber, 2002) . Each scholar may exhibit aspects of these ideal types over their career or across different circumstances and contexts. We recognise that there are further differences in behaviours among scholars such as publishing rush in order not to be "scooped" (Grimes et al., 2018: 2) or tendency to publish mainstream theories and methods and significant results (Grimes et al., 2018). We also note that the publishing rush could lead to bibliographic amnesia that erases foundational scholarship (Chanlat 2018) and alienation of academics to the values and practice of the management profession (Alakavuklar et al., 2017). Thus, at the micro-individual level diversity among actors (both individual and institutional), as we outlined above, illustrates the complexity of gaining all actors' support for crafting a change agenda for academic publishing. Therefore, we present three scenarios rather than one in order to retain the complexity of the divergent nature of vested interests of the individual actors in the sector. It is important to explore further how the macro, meso and micro levels interact. In this juncture, we explore three interconnected scenarios of possible change in the field of scientific publishing.

Three scenarios for the future of academic publishing in management

We argued above that the bottleneck created in promulgation of knowledge products in management research is an outcome of the toxic illusio and the pyramid scheme of commercial publishing, and publishing careerist ends that corroded the potential of management research to create public good, remain relevant, and foster engaged and responsible orientations among management scholars.

Scenario One: The fully commercialized model - make them pay

As some publishers are setting up their own private business schools, i.e. Pearson Business School, commercialization is likely to be more entrenched in the future. In the current system of management research, the illusio that we described is primarily concerned with the clash between the commercial model of academic publishing houses and the public good model on which higher education knowledge production is predicated. In this first scenario, we present a more commercialized future for management research and publishing. The current system of academic knowledge production renders commercial interests invisible in the extremely lucrative business model that the publishing houses have developed (Baruch, Ghobadian and Ozbilgin 2013). Younger academics are drawn into the game of publishing, and its toxic illusio for authoring, reviewing and editing with the promise that they contribute towards knowledge creation and add to the public good by doing so. The system also rewards them in terms of career progression if they author, review and edit elite journals.

In order to lift the veil of illusio that the current interface between higher education and private publishing houses has, there is need for raising awareness around how copyright is transferred to publishers once a paper is accepted for publication, how the reviewers and editorial board members are not paid with the assumption of public service (May 2020). The commercial model is predicated on commercial publishers accruing wealth, exploiting scholars' naive assumption that they offer free and voluntary public service when publishing academic papers (Fyfe et al., 2017). This illuso could be overcome if academics start demanding commercial rates for the journals for which they author papers, review and edit. Pirate sites are the early signs of resistance against the current exploitative commercial model of publishing houses. Although the pirate sites, such as Sci-Hub, breach the copyright agreements, they are particularly popular alternatives in order to gain wider access to science in developing and less developed countries where intellectual property rights are less regulated.

The commercialized scenario accepts that private sector publishers are here to stay (Shipp 2000), and they are increasingly legitimate partners in the field of academic knowledge production (Nasdaq 2018). Yet their commercial interests should be recognized as such and they should start paying academics commercial rates for their services. This model of interface between academia and publishers is evident in some fields of management. For example, journals in the field of finance and accounting have long been practicing fee structures for authors, reviewers and editors. The first scenario that we propose lifts the illusio further and considers the commercial publishers as private sector enterprises with which academics interface. Consultancy rates that management scholars charge to the commercial sector is up to 10 times higher than what they would charge for their services to public and voluntary sector organizations. There is no reason for academics not to charge for authoring, reviewing and editing papers when they submit their work to commercial publishers. Yet, for this to happen, there is need for wider awareness raising about the detrimental and exploitative nature of commercial publishing.

In summary, the first scenario recognizes the value chain in the scientific knowledge production and consumption and seeks to achieve an equitable outcome in terms of where the commercial and public value are generated and how such values should be distributed to actors for their contribution. Yet we are fully aware that the privatisation and commercialisation of the knowledge production may present an assault to the idea of public good and public service. Therefore, we present the commercialised route in order to illustrate how the private sector publishing houses use the voluntary labour of academics as authors and reviewers as a pyramid

scheme in the current system. Thus, the interface between the public sector and private business of publishing should be regulated better in order to protect the rights of academics and the public sector. However, we need to question the viability of an individual academic breaking with the illusio of the present publishing model and demanding pay for their voluntary work in the future. Mergen and Ozbilgin (2021) explain that an individual would find it difficult to break with the illusio, unless they experience a cognitive dissonance between their love of academic publishing and its unethical and morally dubious commercial practices. When the ethical concerns are too serious for an individual academic to ignore, such cognitive resonance could generate a break away from the illusio. As we explained in the earlier parts of this paper, such moral concerns have been raised by academic institutions as well as individual scholars and the purpose of this provocative paper is to raise such awareness.

Scenario 2 - The promises of open science

Open science, as a heterogeneous and large movement, is here to tackle the ailments in academic publishing, which is locked behind paywalls. Open science could be the beginning of a socio-technological revolution that mobilises the Internet to transform the global value chain of production and diffusion of research. Open science may bring an incremental evolution to deal with the very large costs engendered by the oligopoly of commercial publishers that academic institutions and states can no longer bear. Multiple stakeholders and conflicting interests are involved in how these possibilities may evolve. All levels in the academic ecosystem will either play a role in promoting science as a public good or consider it as a tool mainly oriented towards competition, commercialization, and profit generation. Whatever the outcome, should our community of management scholars not be at the forefront in analysing this new system and its developments?

If the first scientific revolution took place in the 17th century when scientists, who needed to share their resources, could do it through scientific journals and books with multiple revised versions, the second one may have begun in the 21st century. There is a toxic conjunction between the Internet, digitization and the enclosure of academic production by oligopolistic publishers. This toxic effect of commercialisation is felt not only on library funds but also on the production and diffusion of science. This toxicity alerted a countermovement marked by many collective declarations and institutional regulations, which range from open access and open science to the collaborative project, which aim at transforming the entire scientific system (Tennant et al., 2020). Let us simply quote the European Commission's vision (2016: 33): "Open science represents a new approach to the scientific process based on cooperative work and new ways of diffusing knowledge by using digital technologies and new collaborative tools". It was rolled out at the European level and implemented through the Horizon 2020 European funding for research projects, the results of which had to be published open access.

Open access relies on the reduction of marginal costs of producing and the dissemination of an article. However, as open access is financed through traditional channels and through APCs (Article Processing Charges), it will not be profoundly disruptive. This is especially true when oligopolistic publishers use APCs to raise their overall prices. Nevertheless, from ordinary open access and double-blind reviewed articles or journals to the most innovative and cooperative scientific ventures (Björk, 2011) multiple options exist and can be combined. However, the question remains whether the commercial publishers would allow the scientific community to regain control of its own production/communication.

Articles may be posted, before or after reviewing, out of, before or after traditional publication, in an open public or private repository, alongside a lot of other documents in the form of books, data, software, audio and video recording. The size and format of what can be shared and presented are no more constrained by paper pages or publishing formats. New ways of reviewing are also emerging: For example, open submission by disclosing authors' identity, open reviewing by disclosing reviewers' identity, open report alongside the article, participatory enlarged reviewing by practitioners and general public, open comments after publishing, interactions between reviewers, between authors and reviewers. The possibility of stimulating an in-depth debate along with the risks of losing the certification function is developing.

Using platforms and mixing some of these different options, conventional journals transform. Resultantly, diverse forms of publishing venues appear, for profit or not. As an illustration of innovative forms of publishing, we shall present the mega-journals and the overlay journals or epi-journals. The online only mega-journals with no constraint concerning the size or number of issues, their editors, and reviewers, accept without delay the submitted works in their field, which has scholarly soundness. Publishing in this system has proven to be particularly important in times of crisis. The mega-journals then delegate to the readers the task of commenting on the value of each contribution. In the overlay or epi journals, selected or submitted works are drawn from an open repository, while the editorial board and reviewers validate the rigor and relevance of the papers and highlight the value of each contribution. They sometimes build a very strong editorial line and encourage interactions among scholars. With online only journals, multiple versions can be posted incorporating advances and contributions. If you add the potential of Artificial Intelligence, for example simply as a tool of translation allowing previously silent voices to be heard, scientists may forget a lot of the traditional publishing limitations when they decide to do so collectively. However, the diverse journal services, be they bundled or distributed between specialized entities; infrastructures and contents must be protected by legal status, in order to avoid the risks of being transformed into profitable enterprises, which depart from an open science paradigm that focuses on sustainability. Thus, most open edition publishers adopt the Creative Commons licensing but a lot more devices have to be built and funding be diverted toward open science.

Assessment practices are recognized as the core of the publishing system and its virtuous as well as toxic effects. "The conclusion is actually simple: the evaluation of research is the keystone, and it has already been identified […] as structuring global research architecture" (Guédon, 2019: 3). The San Francisco Declaration on Research Assessment (DORA, 2012) attempts to fight the domination of the Journal Impact Factor as a primary yet faulty parameter for comparing individuals as well as institutions and asks actors of the research ecosystem to assess research on its own merits. This means that academics should no longer subcontract the very important task of evaluation and that more qualitative evaluation tasks should be encouraged and made possible. In the same line, the French academic performance evaluation system, le Centre National de la Recherche Scientifique (the CNRS) asked all its researchers to present only their open access publications, to limit the number of submissions and to have them assessed by trusted experts. Evaluation is not restricted to journal articles, but also includes books and other forms of research output. The possibility of listing a large number of co-authors, where all contributions get recognized, is also one of the ways toward integrating the more collaborative values of open science. Only combined and lucid efforts from public bodies, cooperative and protected publishing devices and active communities of academics could realize the promise of open science.

But how are management academics going to play that game? Are they going to stand inert waiting for others to control their professional destiny? Are they going to combat or to embrace open science? Are they going to creatively implement it? We should insist on the fact that open science still needs some careful checks of quality, even though a consensus would be very hard to find in the field of management. Furthermore, mainstream management or business studies are focused on competition and private profits. Why should their actors adhere to a project pleading for more cooperation in the co-production of public good? The vision for promoting the public good certainly gets more doable if we remain loyal to the original definition of management as the guidance of collective organized and finalized action. Additionally, concerning all researchers, it is observed that "on the one hand, they are information seekers, on the other they are status seekers. They are strongly influenced by the reward system […] a system organized around the impact factor privileges competition of all against all, despite the fact that scholarship also needs collaboration" (Report of the European Expert Commission, 2019: 6).

Scenario Three: Changing management education and research

This third scenario with a long-term and holistic perspective delineates the illusio regarding the relevance crisis in management education, research and publishing. It is a move from the speculative bubble of status quo to reality with the increasing pressure of the grand challenges such as climate crisis, poverty and inequalities which necessitate a reconsideration of the content of what we call "management". The societal impact and an openness to emerging forms of organizations such as sustainable entrepreneurship (Nicolopoulou et al., 2015), beneficial corporations may provide timely and effective responses to the arising emergencies such as pandemics, environmental problems and social unrests. Neoliberal policies and mainstream economic perspectives based on growth and profit rather than development (Costanzo et al., 2015) resonate also in management thinking and publishing which need to be challenged by the scholars who often fail to question these influences. The existing academic focus is accused of restricting the contribution of the business schools to society (Jack, 2020). Recent debates on critical performativity and intellectual activism delineate the historical and political associations of academic work with neoliberal hegemony and encourage alternative ideas to create a freer, fairer and progressive world (Contu, 2020).

In its present state, the substance of management education and research falls short of dealing with the challenges we face. There is a lack of sensitivity to indigenous and emic conditions in different contexts and their potential regarding knowledge creation in management research. Heilbron and Gingras (2018) claim that there is a Euro-American duopoly in the production of academic output which turns to be monopolistic when authorship, citations and language are considered; English is the dominant language with the hegemonic position of USA journals and the impact of globalisation is relatively weak. Durand and Dameron (2008) also stress the North American domination in the business scholarship. The illusio of the hegemonic order in academic publishing encourages researchers to import Anglo-American management tradition and mainstream formats and perspectives to different contexts. Transnational collaboration mostly occurs between researchers from EU, USA and other English speaking countries and China is gaining influence (Heilbron and Gingras, 2018). Therefore, the question regarding the ways of promoting indigenous and emic knowledge and incorporating it into our knowledge base in order to deal with the wide range of global challenges remains to be an important one. There are promising developments, such as open science and digitalisation and their impact on dissemination that need to be supported by a change in the mindset of the scholars. Changing the culture of academic publishing will be a long-term transformational project.

Furthermore, valuing teaching and community service which prioritizes collaboration with practitioners in different areas and forms (NGO, business firm, political institutions, arts and crafts, etc.) may also help management researchers and educators enrich their understanding. This may also bring them to better assess the global challenges we are facing today. Environmental and social sustainability challenges pose serious problems however, they attract limited research interest in management. Dunne, Harney and Parker (2008) point to the myopia of the management scholars regarding political issues and their making a virtue out of their ignorance. This highlights the illusio regarding relevance in management education, research and publishing. Major business organizations such as World Economic Forum (WEF Davos Manifesto, 2019) and Business Roundtable (2019) have revised their statements of purpose by replacing shareholder primacy with stakeholder primacy, which are supplemented also by an affinity for the environmental and social issues, even though mainly with the impetus of growing sustainable finance. Management research, publishing and education are relatively slow in adopting these changes. Academic publishing remains focused on old thinking based on financial performance rather than human/society focus. There is a need for a large overhaul in management curricula as well as in research focus. The scenario 3 oversees a radical change in business schools such as the radical revision of the teaching materials and emancipation of research topics. This idea also connects with the transformation of the academic publishing model, based on a post-humanist paradigm (Ozbilgin and Erbil, 2021) that captures the co-existence of humanity, nature and technology and which challenges the domination of commercial logic alone.

The initial moves in this direction date back to 2007 when the Principles for Responsible Management Education (PRME) was founded by a United Nations-supported initiative to advance the notion of social and environmental sustainability along with the economic one in schools around the world (UNPRME, 2019). With over 650 signatories worldwide, PRME constitutes a major collaboration between the United Nations and higher education institutions related to management and creates awareness about the sustainable development goals (SDG) promoted again by the United Nations (UN, 2015). Similar initiatives are expanding and recent moves of the accreditation institutions to include social responsibility and sustainability in their assessment of business schools can contribute to the improvement of the relevance in management research and publishing. In 2020, AACSB has revised its standards for approximately 900 business schools across the world to promote “societal impact of business school’s teaching and research programmes” and EQUIS plans to embrace the seven principles of RRBM for responsible research next time it revises its standards (RRBM, 2020). Translation of these changes to the context of academic publishing is yet to develop.

Furthermore, the restraining effect of the Covid 19 pandemic on university budgets urges universities to search for different sources of external funds. The university leaders are increasingly encouraging their staff to get research grants which may act as another leading force for the return to relevance. The requirements of the international and national research grants often prioritise the societal impact of the research which necessitates a better interaction between practitioners and scholars and the contribution to the well-being of the society. There is a recent development of research teams composed of academics collaborating with practitioners. This way, real life challenges, contextual differences and requisites of different countries, regions, sectors and milieus may have higher chances of getting research attention. This, in turn, can be a major step to bring back the relevance into management education, research and publishing. This potential power shift towards the grant providers has also the capacity of reducing the concentration of power in the hands of a few large publishers. This may bring in a variety of actors who are more experienced in generating relevant research.

However, we also recognize that the grant income from multiple sources may also introduce the problem regarding the independence of the researcher which the scholars need to safeguard.

Although these initial steps are promising they are not enough on their own to deal with the illusio and to overcome the crisis of relevance in management research, education and publishing if they are not accompanied by engaged scholars' willingness and openness to have wider, inquisitive and transdisciplinary perspectives. If this vision of transforming the field of business and management is to hold true, relevance should become an integral part of how we research, author academic works and publish in the future.

Conclusion

The challenges and tensions in academic publishing that we explored in this paper will not go away on their own accord. There are many players, institutional, national and individual actors with stakes in the current system, which has potential to evolve. What may eventually happen will depend on the interplay of multilevel forces and interests that compete, interact and sometimes cross-fertilize. In order to tackle the challenges facing academic publishing, we need action and intervention in all three levels of the academic publishing ecosystem. Larivière (2015) demonstrated the oligopolistic nature of commercial academic publishing and its exploitative nature. In the current climate of growing cynicism and distrust in the mixed model of voluntary work in an increasingly marketized scientific field, a number of outcomes could be expected. In the first scenario, if marketisation takes greater reach, we may observe demands for academic work including authorship, reviewing and editorial work to be paid at commercial rates. Early signs of the tension in the system are emerging as reviewer fatigue (Breuning et al., 2015) as fewer scholars are willing to conduct voluntary and non-paid reviews for journals. The second scenario is a model where open access and, more so, open science is demanded and practiced by active communities, supported by leading institutions and public bodies. The third scenario is based on a complete transformation and overhaul of management education and research to refocus on the core purpose and aims of scientific inquiry, which we specified as the relevance. We present these three different scenarios as a provocation: the future of management research and knowledge production in this field is not a given. Having considered these alternative future scenarios, we can envisage hybrid and negotiated outcomes. The competing evolutionary paths of technological, economic, social and political changes in academic publishing in the field of management is likely to result in negotiated outcomes, rather than any one of the pure scenarios. Our contribution in this regard is our call for better informed and evidence-based decision making regarding the future of academic publishing, which combats the exploitative practices, and supports the balanced and sustainable development of commercial, open science and relevance scenarios in a way that protects and promotes the public good.

We can also envision the somehow idealized and always endangered ethos of science that Merton (1942) embodied in “four sets of institutional imperatives-universalism, communism, disinterestedness, organized scepticism” evolving while accepting diversity, heterogeneity, and contradictions. The coronavirus crisis is encouraging us to question the whole socioeconomic model in which the production and transmission of knowledge is embedded. Some institutions and actors continue to compete and aspire to be the best in class, many others ask for more cooperation and openness, especially in sciences, recognizing that we are all in the same boat. This divide between competition and cooperation in the sector may have serious consequences for academic research and publishing in the field of business and management.

At the beginning of the century, OECD (2008) proposed four prospective scenarios for higher education systems. One of them was about how to succeed: "Higher Education Inc.". In this scenario "higher education institutions compete globally in order to provide education services and research services on a commercial basis. Research and teaching are increasingly disconnected, as they have always been in the General Agreement on Trade in Services (GATS)". But the scenario at odds with this one may get more chances today if we fight for open networking. "In this scenario, higher education is viewed as internationalized and it involves intensive networking among institutions, scholars, students and with other actors such as industry. It is a model based more on collaboration than on competition." In March 2020, while we were writing, multiple initiatives were taking place with this orientation. One of them was that of the ICOLC (International Coalition of Library Consortia): "We ask that publishers immediately consider making any relevant content and data sets about COVID-19, Coronaviruses (regardless of species affected), vaccines, and antiviral drugs... which are currently held behind subscription-only paywalls, open access in order to facilitate research, to guide community public health response, and to accelerate the discovery of treatment options". The covid19 pandemic has been instrumental in pushing for the open access agenda.

Our paper is not a system critique alone but also brings new insights by bridging the hegemonic business model, resistance to the dominant system and an alternative route to academic publishing. In doing so, we call for engaged scholarship (Van de Ven, 2007) and leaders from the margins (Samdanis and Ozbilgin 2020) to push for reforms to the system of academic publishing with a view to retain its contribution to public good and to curb the exploitative potential of vested commercial and hegemonic interests within it. We refer to the divergent paths that academic publishing is taking and its changing nature. Our scenarios address this need for alternative forms of academic publishing to be discussed so that actors can make informed decisions about which game to join. Therefore, our paper demonstrates the divergent and emergent paths that academic publishing is taking. We consider academics as moral actors with value systems in regard to the academic publishing game. They are not submissive observers. In particular, we draw attention to the uneven nature of the power and interest dynamics in academic publishing. Academic games are imbued with uneven power relations that we expose in the paper across scenarios and hope to inform the actors of their detrimental consequences. Our profession is not simply to understand and to learn the game but to impact the ethical constitution of business into the future. We highlight the dangers for different stakeholders in the academic game and offer alternatives in terms of how a social good versus private investment model could evolve in terms of the governance of academic game.

References

Alakavuklar, O. N., Dickson, A. & Stablein, R. (2017). The alienation of scholarship in modern business schools: From Marxist material relations to the Lacanian subject. Academy of Management Learning and Education, 16(3), 454-468. [doi:10.5465/amle.2015.0004]

Alvesson, M., Gabriel, Y., & Paulsen, R. (2017). *Return to meaning: A social science with something to say*. Oxford University Press.

Alvesson M., and Sandberg, J. (2013). Has management studies lost its way:ideas for more imaginative and innovative research. 50(1):128-152.

Baruch, Y., Ghobadian, A., & Özbilgin, M. (2013). Open access–The wrong response to a complex question: The case of the finch report. *British Journal of Management*, 24(2), 147-155.

Björk, B. C. (2011). A study of innovative features in scholarly open access journals. *Journal of Medical Internet Research*, 13(4), e115.

Bourdieu, P. (2000). *Pascalian meditations*. Stanford University Press.

Bourdieu, P. (1988). *Homo academicus*. Stanford University Press.

Bourdieu, P. and Wacquant, L.J.D. (1992). *An Invitation to Reflexive Sociology*. Chicago, IL: University of ChicagoPress.

Breuning, M., Backstrom, J., Brannon, J., Widmeier, M. (2015). Reviewer Fatigue? Why Scholars Decline to Review their Peers' Work. *Political Science and Politics* 48(4):595-600

Buranyi, S. (2017). Is the staggeringly profitable business of scientific publishing bad for science? *The Guardian*, 27-06

Business Roundtable (2019). https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans Accessed on the 2 October 2020.

Calderon, A. (2018). *Massification of higher education revisited*. Melbourne: RMIT University.

Chanlat, J. F. (2018). Les avatars de la circulation des idées entre les champs de langue française et de langue anglaise. AEGIS, 3(1), 7.

Contu, A. (2020) Answering the crisis with intellectual activism: Making a difference as business schools scholars. *Human Relations,* 73(5): 737–757 https://doi.org/10.1177/0018726719827366

Daniel, C. A. (1998). *MBA: The first century*. Bucknell University Press.

Durand, T., & Dameron, S. (2008). *The future of business schools: Scenarios and strategies for 2020*. Palgrave Macmillan.

Chevrier, S. (2014). Publish... and perish! *Annales des Mines-Gérer et Comprendre*, (1) : 18-21.

Costanza, R., G. Alperovitz, H. Daly, J. Farley, C. Franco, T. Jackson, I. Kubiszewski, J. Schor and P. Victor. (2015). Ecological Economics and Sustainable Development: Building a Sustainable and Desirable Economy-in-Society-in-Nature. Chapter 18, pp. 281-294 in M. Redclift and D. Springett (eds.). *Routledge International Handbook of Sustainable Development. Routledge*, New York.

Didegah, F., & Gazni, A. (2011). The extent of concentration in journal publishing. *Learned Publishing*, *24*(4), 303-310.

DORA, (2012). San Francisco Declaration on Research Assessment https://sfdora.org/ accessed on 28 February 2020.

Dunne, S., Harney, S. & M. Parker (2008). Speaking out: The responsibilities of management intellectuals: A survey. Research Collection Lee Kong Chian School Of Business https://ink.library.smu.edu.sg/lkcsb_research/5402/ Accessed on the 1st March 2020.

European Commission (2016). Open innovation, Open Science, open to the world. A vision for Europe. Brussels: Directorate-General for Research and Innovation.

Fyfe, A., Coate, K., Curry, S., Lawson, S., Moxham, N., & Røstvik, C. M. (2017). Untangling academic publishing: A history of the relationship between commercial interests, academic prestige and the circulation of research. . Discussion Paper. University of St Andrews.

Greenhalgh, T., Ozbilgin, M., & Contandriopoulos, D. (2021). Orthodoxy, illusio, and playing the scientific game: a Bourdieusian analysis of infection control science in the COVID-19 pandemic. *Wellcome Open Research*, *6* (126), 126.

Grimes, D. R., Bauch, C. T., & Ioannidis, J. P. (2018). Modelling science trustworthiness under publish or perish pressure. *Royal Society open science*, 5(1), 171511.

Guédon, J.C. (2019). Future of Scholarly Publishing and Scholarly Communication. Report to the Expert Group to the European Commission.

Heilbron J., Gingras Y. (2018) The Globalization of European Research in the Social Sciences and Humanities (1980–2014): A Bibliometric Study. In: Heilbron J., Sorá G., Boncourt T. (eds) *The Social and Human Sciences in Global Power Relations. Socio-Historical Studies of the Social and Human Sciences.* Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-73299-2_2

Huse, M. (2020). *Resolving the Crisis in Research by Changing the Game: An Ecosystem and a Sharing Philosophy*. Edward Elgar: UK.

ICOLC (2020) Statement on the Global COVID-19 Pandemic and Its Impact on Library Services and Resources https://icolc.net/statement/statement-global-covid-19-pandemic-and-its-impact-library-services-and-resources

Jack, A (2020). Academic focus limits business schools' contribution to society. *Financial Times* 24 February 2020.

Kamasak, R., Ozbilgin, M., & Esmen, A. R. (2020). The High Stakes Use of Language Proficiency Tests as Illusio and Pyramid Scheme: An Evaluation of Their Social Aspects, Validity, and Reliability. In *Optimizing Higher Education Learning Through Activities and Assessments* (pp. 188-203). IGI Global.

Larivière, V., Haustein, S. and Mongeon, P. (2015). The oligopoly of academic publishers in the digital era. *PloS one*, 10(6), p.e0127502.

Lussier, S. (2014). Les enseignants-chercheurs en gestion à l'épreuve des nouvelles injonctions institutionnelles en matière d'évaluation : une étude France-Québec (Doctoral dissertation).

May, C. (2020). Academic publishing and open access: Costs, benefits and options for publishing research. *Politics*, *40*(1), 120-135.

Mergen, A., & Ozbilgin, M. F. (2021). Understanding the followers of toxic leaders: Toxic illusio and personal uncertainty. *International Journal of Management Reviews*, 23(1), 45-63.

Merton, R. K. (1996). The Normative Structure of Science (1942). *The Sociology of Science*, 267-78.

Miller, A. N., Taylor, S. G., & Bedeian, A. G. (2011). Publish or perish: academic life as management faculty live it. *Career Development International*, 6(5), 422-445.

Musselin, C. (2018). New forms of competition in higher education. *Socio-Economic Review*, *16*(3), 657-683.

Nasdaq (2018) Academic Publishing is big business, and how blockchain can make a difference.https://www.nasdaq.com/articles/academic-publishing-big-business-and-how-blockchain-can-make-difference-2018-07-12

Katerina Nicolopoulou, Iain Lucas, Ahu Tatli, Mine Karatas-Ozkan, Laura A. Costanzo, Mustafa Özbilgin & Graham Manville (2015) Questioning the Legitimacy of Social Enterprises through Gramscian and Bourdieusian Perspectives: The Case of British Social Enterprises, *Journal of Social Entrepreneurship*, 6:2, 161-185

Özbilgin, M. F. (2009). From journal rankings to making sense of the world. Academy of *Management Learning & Education*, 8(1), 113-121.

Özbilgin, M. (2014). Promoting diversity in management scholarship: Opening the doors for multiple languages, and interdisciplinary dialogue and developing our communities, *European Management Review*, 11, 1-14.

OECD. (2008). Four Future Scenarios for Higher Education. OECD/France International conference. Higher Education to 2030: What Futures for Quality Access in the Era of Globalisation? CNAM, Paris, 8-9 December

Page B. (2019) Elsevier records 2% lifts in revenue and profits. *The bookseller*, 21 February 2019. https://www.thebookseller.com/news/elsevier-records-2-lifts-revenue-and-profits-960016

Page, B. (2020). Elsevier sees 2019 profit and revenue lift. *The Bookseller*, 21 February, 2020. https://www.thebookseller.com/news/elsevier-sees-profit-and-revenue-lift-1192787

Research and Markets (2020) Global and technical publishing https://www.researchandmarkets.com/reports/4912342/global-scientific-and-technical-publishing-2019?utm_source=dynamic&utm_medium=GNOM&utm_code=w67qnp&utm_campaign=1346655+-+Global+%2410B+Scientific+%26+Technical+Publishing+Industry+Report%2c+2019-2023&utm_exec=joca220gnomd

RELX (2019) Annual Report and Financial Statements. https://www.relx.com/~/media/Files/R/RELX-Group/documents/reports/annual-reports/2019-annual-report.pdf

RRBM Responsible Research in Business and Management (2017) A Vision of Responsible Research in Business and Management: Striving for Useful and Credible Knowledge https://rrbm.network/wp-content/uploads/2017/09/White_Paper.pdf Accessed on the 2 March 2018

RRBM (Responsible Research in Business and Management) (2020) Brief Status Report https://www.rrbm.network/about-us/brief-status-report/

Report of the Expert Group of the European Commission (2019) Future of scholarly publishing and scholarly communication - Publications Office of the EU (europa.eu)

Ozbilgin, M., & Erbil, C. Post-hümanist İnovasyon: Gig Ekonomi Özelinde Moto Kuryeli Teslimat Sektörü Örneklemi. *Sosyal Mucit Academic Review*, *2*(1), 22-41.

Samdanis, M., & Özbilgin, M. (2020). The Duality of an Atypical Leader in Diversity Management: The Legitimization and Delegitimization of Diversity Beliefs in Organizations. *International Journal of Management Reviews*, 22(2), 101-119.

Schekman, R. (2013). How journals like Nature, Cell and Science are damaging science, The Guardian, 9 December https://www.theguardian.com/commentisfree/2013/dec/09/how-journals-nature-science-cell-damage-science

Schofer, E., & Meyer, J. W. (2005). The worldwide expansion of higher education in the twentieth century. *American Sociological Review*, 70(6), 898-920.

Shapiro, D. L. (2017). 2016 Presidential Address: Making the Academy Full-Voice Meaningful. *Academy of Management Review*, 42(2), 165-173.,

Shipp, J. (2000). Commercial scholarly publishing: the devil incarnate or divine saviour? *History of Economics Review*, *32*(1), 37-45.

Supiot A. (2017). *Governance by Numbers: The Making of a Legal Model of Allegiance*. Hart Publishing

Tennant, J., Agarwal, R., Baždarić, K., Brassard, D., Crick, T., Dunleavy, D. J., … Yarkoni, T. (2020, March 6). A tale of two 'opens': intersections between Free and Open Source Software and Open Scholarship. https://doi.org/10.31235/osf.io/2kxq8

Tourish, D. (2019) Management studies in crisis:Fraud, deception and meaningless research Cambridge University Press.

UNPRME (2019) United Nations Principles of Responsible Management Education https://www.unprme.org/ Accessed on the 2 July 2019

UN (United Nations) (2015) Sustainable Development Goals. https://sustainabledevelopment.un.org/?menu=1300 Accessed on the 23 January 2020.

Van de Ven, A. H. (2007). *Engaged scholarship: A guide for organizational and social research*. Oxford University Press on Demand.

Weber, M (2002) The Protestant Ethic and The Spirit of Capitalism, Penguin Books, translated by Peter Baehr and Gordon C. Wells

World Economic Forum (WEF) (2019) Davos Manifesto 2020: The universal purpose of a company in the fourth industrial revolution. https://www.weforum.org/agenda/2019/12/davos-manifesto-2020-the-universal-purpose-of-a-company-in-the-fourth-industrial-revolution/ Accessed on the 28 February 2020.