

Relevant interventionist research: balancing three intellectual virtues

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This paper argues for a balanced approach to considering the three intellectual virtues of Aristotle, brought forth by Flyvbjerg [2001. *Making Social Science Matter: Why Social Inquiry Fails and How It Can Succeed Again*. Cambridge: Cambridge University Press] – techne, episteme and phronesis – and links them to recent debates on the relevance of management accounting research. The intellectual virtue of phronesis is viewed as opening an avenue for conducting management accounting research that is societally relevant and the interventionist research (IVR) approach is suggested to form one natural platform for such research. The paper underlines that the intellectual virtue of episteme, being related to theoretical relevance, is a necessary element in all scholarly endeavours and that IVR has so far tended to suffer from being too much focused on the intellectual virtue of techne and thereby practical relevance only. The method of ‘engaged scholarship’ is offered as one fruitful option for balancing the three intellectual virtues and conducting research that is relevant to several dimensions.

Keywords: management accounting; discursive logical argument; relevance; intellectual virtues; phronesis; interventionist research

1. Introduction

The starting point of this paper is the observation and claim of Flyvbjerg (2001) – based on Aristotle (1955) – that there are several, rather than just one, intellectual virtues that researchers can pay attention to: episteme, techne and phronesis. The major aim of this paper is to cross-examine this three-item typology of intellectual virtues and especially the idea of phronetic social science (PSS) – the one forcefully promoted by Flyvbjerg regarding social sciences – against the key ideas of interventionist research (IVR). For Flyvbjerg, PSS represents science which has a practical, yet simultaneously value-sensitive agenda, leading to ‘social science that matters’. Flyvbjerg regards PSS as applying the virtue of techne ‘with head on it’ (making it thereby phronetic), whereas for him, techne alone represents ‘headless social engineering’. PSS stresses the

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importance of dialogue with the targets of research and that values and power issues are taken into consideration.

The purpose of PSS research can vary from conceptual clarification to developing frameworks to critique, and as PSS can be interventionist; its linkages to IVR are a natural target for closer examination. IVR revolves around making an impact in the world through research and can be defined as a longitudinal case study approach (with variations), in which active participant observation and sometimes also the implementation of development ideas brought forward by the field researcher are deliberately used as a research asset in order to produce theory contribution (Jönsson and Lukka 2007, Suomala and Lyly-Yrjänäinen 2012). IVR is often blamed to represent only ‘social engineering’, which in Aristotle’s terms lean on *techne*. Our paper challenges this limited, but widespread tendency of IVR, and explores the inherent linkages of high-quality IVR with *phronesis*, indicating the potential of IVR in this direction.

However, while we agree with Flyvbjerg regarding his major claim of the need for more PSS kind of research, we also challenge his view that underplays the potential of social sciences regarding episteme. We argue that IVR – similarly to all scholarly endeavours – should always have, and would benefit from, episteme-related purposes, too. In our view, Flyvbjerg’s position regarding episteme is not only radically outdated and limited when it comes to social sciences, but also hard to defend in the long run as a viable position for the academe. We stress that lacking epistemic virtue, the academe would over time lose its voice in society. After all, also social scientists get their central *raison d’être* from their epistemic strengths, even if they of course need not be their only asset.

We advance an argument for the need of a balanced employment of the three intellectual virtues in IVR and social sciences overall. Regarding how such balanced research could be conducted, the issue of the interface between theory and practice is in focus. We will draw from recent advances in the management literature, especially from the notion of ‘engaged scholarship’ of Van de Ven and Johnson (2006) and Van de Ven (2007) and that of the ‘practice epistemology’ of Jarzabkowski *et al.* (2010). These two notions are in line with our thoughts as to how a balanced co-operation between *techne*, episteme and *phronesis* can work. Accordingly, knowledge can well be developed in a collaborative effort between academics and practitioners, a view that has for a long time been largely neglected in business studies research. In the research designs of engaged scholarship, the role of the researcher can vary from non-interventionist to a more or less strongly interventionist one. IVR approaches would have certain notable strengths when engaged scholarship is nurtured in the spirit of practice epistemology.

Finally, we will open up the notion of relevance in management accounting research, arguing that this concept is typically understood too narrowly as referring to practical relevance only (linking it thereby tightly but narrowly to only *techne*). Defining the notion of relevance broadly as something that is of significance for something else,¹ we suggest that relevance should be linked to all three intellectual virtues raised by Flyvbjerg (2001), yet with differing angles to interpret it. Hence, *techne* relates to the practical relevance of a study, episteme to its theoretical relevance and *phronesis* to its societal relevance. While theoretical relevance should be viewed as a necessity for all scholarly projects, we generally argue for a balanced consideration of the three intellectual virtues as well as the three dimensions of relevance, both in IVR and in management accounting research overall.

The paper is structured as follows. In the next section, we will introduce the three intellectual virtues of episteme, *techne* and *phronesis*, focusing on the main ideas of PSS, and cast them against the core of IVR. Subsequently, we will develop our argument for the need of episteme both in IVR and social sciences overall. In the section that follows, engaged scholarship will be brought forth as a method to bridge the attempts of researchers and practitioners to advance knowledge, well suitable for IVR, too. This will lead us to reconceptualise the notion of relevance

and argue for the need and usefulness for a balanced consideration of the three intellectual virtues in IVR and management accounting research overall. The paper ends with conclusions.

2. PSS and IVR

Flyvbjerg (2001) draws directly from Aristotle when he mobilises his key notions referring to three different kinds of intellectual virtues: *episteme*, *techne* and *phronesis*.² For Flyvbjerg, *episteme* is viewed to concern universals and the production of knowledge which is invariable in time and space with the help of analytic rationality, corresponding to the modern scientific ideal in natural sciences and responding to ‘know why’ types of questions. *Techne* again is craft and art, and as an activity it is concrete, variable and context-dependent, being based on practical instrumental rationality and responding to ‘know how’ type of questions. While also *phronesis* is closely connected to action and is context-dependent, it deals with ethically practical wisdom and knowledge of how to behave appropriately in each particular circumstance. *Phronesis* is linked to value rationality as opposed to technical rationality and is often translated as ‘prudence’ or ‘practical common sense’ (Flyvbjerg 2001, pp. 55–7). Flyvbjerg extends the original notion of *phronesis* by Aristotle by stressing the importance of connecting power issues to it based on the works of Habermas and particularly Foucault.

Flyvbjerg (2001) argues that social scientists are typically not sufficiently aware of these three different intellectual virtues, with unfortunate consequences, and especially that the long-lasting tendency to imitate natural sciences in strongly focusing on *episteme* will unlikely ever be a way out from the Science Wars type of critique of low quality or pre-paradigmatic social science. While natural sciences are at their strongest regarding *episteme*, in that regard, social sciences are at their weakest, Flyvbjerg argues. He insists this is essentially due to the facts that knowledge about human activities cannot exclude context which the notion of ‘ideal theory’ seems to require and that social sciences are bound to their inherent double reflexivity – that there are subjects at both ends of the inquiry. He argues that instead of *episteme* (or *techne*) social sciences would find a fruitful direction, and solid ground for development, from adopting *phronesis* as its cornerstone, leading to a largely new kind of social science, a *phronetic* one – a social science that would matter in society.

For Flyvbjerg (2001), the primary objective for social science is not to provide a theoretical mirror for a society but to provide society with knowledge that can be used as input to the dialogue on topical social challenges and solutions – ‘carry out analyses and interpretations of the status of values and interests in society aimed at social commentary and social action, i.e. practice’ (p. 60). When seeking to fulfil this objective, according to Flyvbjerg, research has to address four wide questions, which are inherently value-rational: ‘Where are we going?’, ‘Is this desirable?’, ‘What should be done?’ and finally ‘Who gains and who loses and by which mechanisms of power?’ (2001, p. 60).

Given that the full answers to the questions phrased by Flyvbjerg are impossible to produce and that even partial answers might be hard to formulate by research, what can then be done? To begin with, Flyvbjerg advises that the researcher must not settle with practising ‘science’ in general but she has to make it explicit, whether she is practicing *episteme*, *techne* or *phronesis*. Concerning the selection from, or emphasis between, these three virtues, Flyvbjerg advocates the potential of social sciences in terms of *techne* and especially *phronesis*, whereas he is extremely doubtful regarding the qualities of social research as to *episteme*. Regarding research setting and approach, this stance would lead the researcher towards context-specific inquiry and appreciating case-based research, which can draw from the power of examples and thus create depth that complements the breadth produced by large sample surveys or archival-based studies, for instance.

For methodological guidance of conducting PSS, Flyvbjerg offers nine principles that make it up as ‘pragmatically governed interpretation of studied practices’ which is ‘an analytic project, but not a theoretical or methodological one’ (2001, pp. 129–40):

- (1) Focusing on values, the researcher must reject both the view that central values are universal and the view of relativism (that any set of values is as good as another); instead the researcher seeks to draw from the studied context and situation and tries to capture the common view among the group or setting under study.
- (2) Placing power at the core of analysis. In addition to values, power serves as another key element of context being analysed. For a phronetic researcher, power is quite elusive and versatile; not negative or positive per se, but something that is exercised and produced within and between institutions and structures.
- (3) Getting close to reality.³ Researchers try to anchor their studies in the context that are being studied (without necessarily going native in the ethnographic sense) and establish close relations to stakeholders in order to stimulate reactions and interest to the research, which is to test and evaluate the findings and their value
- (4) Emphasising little things. The researcher seeks to build as general findings as possible, but through a procedure that takes off by putting effort towards understanding details and ‘little things’.
- (5) Looking at practice before discourse. Phronetic research sees actual daily practices and actual deeds as more fundamental targets of analysis than discourse or theory. At the outset, each individual practice is documented in itself without taking positions regarding ‘the truth-value and significance ascribed by participants to the practice studied’. At the second stage, the researcher seeks to establish the relations from the local practices to the wider context.
- (6) Studying cases and contexts. Judgment is regarded as central to phronesis, and since judgment lies in specific contexts, phronetic researchers draw from case-exemplars in order to understand judgment – be the cases experienced or narrated.
- (7) Asking ‘how?’ and doing narrative. Building an understanding and explanation of any given phenomenon is believed to start by asking ‘how’ questions. Narrative, for one, is regarded as a fundamental vehicle for not only ‘making sense of experience’, but also as a means to recognise future alternatives or scenarios before actually encountering them.
- (8) Joining agency and structure. Practices, actors and structures ought to be studied together while understanding that they are profoundly intertwined. Micro- and macro-level analyses should be combined, not between separate studies, but within individual studies in order to understand how structures shape individual choices and which structural consequences of individual actions are.
- (9) Dialoguing with a polyphonic voice: research is not regarded as the one voice of claiming authority. Instead, the interpretations provided by the phronetic research are understood as inputs for societal dialogue and practice, which serve as the actual test for the interpretations produced. In this test, the strength of interpretation depends upon the acceptance of validity claims underpinning the interpretation.

Flyvbjerg’s (2001) view on PSS has much in common with the typical characteristics of IVR. IVR can be defined as a longitudinal case study approach (with variations), in which the researcher’s active involvement and participant observation is used as a research asset for building access and creating the possibility of gathering in-depth empirical data, and eventually, for producing a

theory contribution. A characteristic feature of IVR is that the researcher is an active participant in the real-time flow of life in the field, and therefore she has to be able to adopt an insider's viewpoint (the emic perspective) to the issues at hand in order to produce theory contribution (the etic perspective). IVR frequently relates to attempts to develop and implement innovations in practice, most explicitly when the constructive research approach – one variant of IVR – is applied (Kasanen *et al.* 1993, Jönsson and Lukka 2007, Suomala and Lyly-Yrjänäinen 2012).

Of Flyvbjerg's list of methodological guidelines for PSS, getting close to reality, looking at practice before discourse, and studying cases in their contexts are typical features of IVR, too (Suomala and Lyly-Yrjänäinen 2012). In IVR, the researcher is an active actor in the real-time flow of life in the field. For coping with and for balancing between various interests present in cases, she has to adopt, or at least consider, the emic (insider's) perspective to the issues at hand. IVR is often a problem-solving oriented venture with explicit connections to challenges present in practice. In IVR, the researcher typically participates in an organisational change project and faces the practical challenges together with the representatives of the case organisation, and it has an element of field experimentation, during which a novel or typically something not yet fully diffused is put into an empirical test (Jönsson and Lukka 2007).

We fully support the main claim of Flyvbjerg (2001): phronetic intellectual virtue is potentially important and is something, which is largely omitted and should be more in the picture in the social sciences. Phronesis adds a powerful aspect to the repertoire of social sciences and its central idea is well in line with the potential of IVR. That said, we do not argue that *all* interventionist studies should be deeply phronetic, but rather that it should be kept in mind as one important aspect to be considered and in some cases developed in a full-blown manner. All interventionist researchers should pay attention to the value issues at stake in their studies and ponder whether they are happy with them or not.⁴ The list of phronetic questions Flyvbjerg presents is highly relevant in this regard. If the researcher feels there are issues around these questions, she has the hard choice to make, whether she wishes to go towards phronetic analysis and interventions in a deeper manner, potentially including critique of the current state of affairs and attempts to, for instance, emancipate people from their iron cages. Such research is not without risks and can jeopardise the researcher's ability to continue conducting her study. Even if the researcher would be able to avoid any signs of arrogance and indications of 'I just know it better' attitude, conflicts can easily arise and the outcome can, at worst, be denial of further access to the field. Indeed, the researcher needs a lot of human skills and prudence to be able to conduct a full-blown phronetic study to completion. But despite these obvious risks, phronetically oriented research should be viewed as an important alternative within IVR – and for all social scientists, for that matter – adding to its potential regarding societal relevance.

3. The need for episteme in social sciences

Faithful to the original characterisations of episteme by Aristotle, Flyvbjerg (2001) suggests that social scientists should just abandon the virtue of episteme, since they will always lose the Science Wars, if episteme is the battleground. We counter-argue this particular claim of his. On the one hand, winning the Science Wars can hardly be viewed as an end per se. On the other hand, rather than just leaving the battleground of episteme, social scientists could alternatively argue that the Science Wars are simply a misguided battle, driven by the false idea that all sciences should be evaluated with the same criteria. The monolithic thinking of one methodology fitting for all sciences had its hay-day at the peak of logical positivism in the 1920s (the so-called 'Given View'), but has long been rejected in the philosophy of science and has become widely criticised in the context of accounting research, too (Lukka and Mouritsen 2002). Flyvbjerg falls into a trap as he seems to accept and adopt precisely those epistemic criteria that natural

scientists put forth in the Science Wars – leading him to strikingly dismiss the virtue of episteme in social sciences. In our view, there is no reason whatsoever to accept precisely those epistemological criteria that natural sciences insist on as the only ones – but actually vice versa.

Consequently, while we are generally very much in accordance with the views of Flyvbjerg (2001) regarding PSS, we are far from convinced of his strong dismissal of episteme in social sciences. To us Flyvbjerg seems even too faithful to Aristotle when he defines episteme in a very narrow, and from the viewpoint of social sciences and humanities, clearly limited and outdated manner. While Aristotle no doubt was one of the greatest thinkers of all times, there has been some development in scholarly thinking regarding episteme in the last 2300 years, which needs appreciation, too. And even Flyvbjerg himself is not able to be consistent regarding his dismissal of episteme as he talks about generalisation from case studies and applies several theoretical models and frameworks as building blocks of his arguments – these are certainly epistemic resources.

For us Flyvbjerg (2001) defines theory in such an extreme manner (with attributes such as being explicit, universal, abstract, discrete, systematic, complete and predictive) – indeed as may be typical of natural sciences – that he happens to build a straw man, which is then easy for him to dismiss from the social science viewpoint: such social science theories are very obviously impossible due to the reasons Flyvbjerg correctly captures. Adopting instead a more liberal notion of theory, particularly by not linking it to complete and abstract universals only, leaves room for meaningful theories (episteme) also in the social sciences. Even though things can never be assumed to be stable (or complete or universal for that matter) when human action is in question, this does not imply that everything would be changeful all the time. There are at least semi-stable patterns of human behaviour and causal linkages on which we can base our own projections and action choices – yet being all the time conscious that institutional settings, rules and routines can change (Kakkuri-Knuutila *et al.* 2008).

Accordingly, we argue that social sciences cannot, and should not, do without episteme. Instead of abandoning episteme in social sciences and focusing on phronesis only, we should find ways of nurturing a balanced approach, which would leave room for the potential of all three intellectual virtues. At least in management accounting, there can be theories that help us to understand how and why things are as they are (reflecting episteme), but also theories helping us to understand how to make things work (techne) as well as theories helping us to cope appropriately with particular situations involved with power and value-related deliberations (phronesis).

Abandoning episteme would certainly be disastrous for the social scientists, especially in the longer run. Would social scientists one-sidedly only conduct phronesis targeted studies, forgetting epistemic purposes, they would sooner or later lose their capacity of having anything to offer. Hence, we do not support the idea of abandoning the intellectual virtue of episteme in social sciences, but vice versa: We think in this era of increasing instrumentalism and cynical publish or perish mentality in the academe, stressing episteme in the name of true scholarship is perhaps more important than ever before (cf. Humphrey and Lukka 2011).

4. Episteme in IVR

The need for carefully considering episteme is burning in the case of IVR, which has so far predominantly stuck to the virtue of techne. Having followed what is going on in and around IVR in management accounting for a longer time (and in several different scholarly roles), the authors of this paper have observed, how many IVR studies that are floating around in conferences and seminars as working papers get tough treatment in scholarly journals and seldom get published there.

Their destiny is often to get published in less prestigious research journals or in professionally tuned outlets – or even remain eventually unpublished. Why is the situation like this?

One likely reason for this is the background and interests of the IVR authors. They tend to be practice-oriented researchers, who often also run consulting practices alongside their academic work. Their typical interests lie in solving problems that emerge from their contacts with practitioners and they are perhaps not used to profound thinking in theoretical terms and problematising things theoretically. Hence serious questions raised by reviewers and editors in high-quality scholarly journals regarding the theoretically motivated research question and theory contribution tend to sound distant and artificial to them as their efforts are targeted to solving practical problems with their client organisations. All this is typical of *techne* and can largely be grounded from the viewpoint of that particular intellectual virtue.

Often the authors of IVR papers likely feel puzzled about the expectations they face in research journals' review processes. A typical defensive counterargument from their side is that journals just wish to function in their academic ivory towers and do not understand the 'real world out there', which IVR is able to capture and say something about. Another defence is to argue that this is a paradigmatic issue: research journals just do not wish to offer IVR a chance, since the empirical linkage is obtrusive and thereby out of the box when evaluated by the scientific criteria of the mainstream. There may be some truth in both of these counterarguments: surely there is an issue of gap between academic and practical knowledge in accounting (Jarzabkowski *et al.* 2010) and surely there are genres and politics in the academe, understandable through the notion of paradigm (cf. Lukka 2010). However, and even more importantly, the other side of the coin is that IVR papers just tend to be weak regarding episteme, even if that notion would be understood way more liberally than what Flyvbjerg proposes based on Aristotle.

We argue that IVR – like any mode of scholarly research, for that matter – can, and should, be always interested in the virtue of episteme and that there is no reason whatsoever why IVR could not do that. There are always possibilities to problematise theoretical issues around matters that may at first glance look only practical. The bottleneck of IVR in this regard is normally that it does not occur to the researchers early enough that also their studies are expected to make theoretical points. All research projects, including IVR ones, are arguably wisest to start with the heavy thought work of developing a research question that is theoretically strongly motivated. That said, especially in IVR projects the researcher needs to be flexible in this regard during the course of the project and be ready to revise the research question while she goes. This does not yet mean that she would be allowed to throw away this key aspect of any scholarly study.

Although there currently seems to be something of a movement for IVR within management accounting academe accompanied with several calls for such research (Labro and Tuomela 2003, Jönsson and Lukka 2007, Malmi and Granlund 2009, Quattrone 2009, Suomala and Lyly-Yrjänäinen 2012), it is noteworthy that the justification of IVR is articulated quite differently between these specific calls. Particularly regarding the role of theory and theory contribution, we can recognise nearly opposite schools of thought amongst the proponents of IVR in management accounting.⁵ For Malmi and Granlund (2009), IVR is about solving practical (and accounting related) problems with practitioners, where the process also includes a phase during which the presented local solutions for identified problems are brought to a more global level by 'synthesizing' them 'to a more general form' (p. 613). Furthermore, it becomes clear that Malmi and Granlund (2009) recognise the role of theory in IVR, but rather than underscoring it as an outcome, they highlight it as an input or a resource one should draw from during the course of research: 'Our position is favourable to interventionist approaches, as in our view the potential of generating directly applicable yet *theoretically informed* solutions to practitioners is important to pursue.' (p. 613, emphasis added). In his commentary, Quattrone (2009) – although criticizing some of the assumptions and definitions made by Malmi and Granlund (2009) – fundamentally shares the

generally positive stance towards IVR. It is particularly interesting that while engaging in a debate on management accounting theories and theorising, Quattrone (2009) demonstrates explicit support for IVR not due to its potential related to theoretical development, but for its capability to affect the non-academic world:

The paper also makes an important point when it calls for interventionist research given that across the two sides of Atlantic and elsewhere, there is a widespread feeling that some accounting publications lack relevance for, and produce very limited effect on the non-academic world. (Quattrone 2009, p. 622)

In contrast to these examples, some authors have put higher emphasis on the role of theory development when building a justification to IVR as an approach. Jönsson and Lukka (2007) underscore that theoretical contributions are a ‘must’ in all types of research – and no less so in IVR. However, they point out that the evidence from the existing examples of IVR studies shows that theory development is in many cases underplayed at the expense of presenting somewhat anecdotal empirical findings and focusing on solving practical problems of target organisations. In other words, while theoretical relevance should be an elemental virtue in IVR, making a theoretical contribution when simultaneously working meaningfully within a flow of real-life events is a true challenge for a researcher and the success in this venture cannot be assumed – not least because the logics of practice and theory can significantly and fundamentally differ from each other (Van de Ven and Johnson 2006, Jönsson and Lukka 2007). Similarly, Suomala and Lyly-Yrjänäinen (2012) share the view that IVR should not be seen merely as a pragmatic exercise, but that theoretical relevance is something to be pursued in parallel to providing value for the participating organisations. However, based on an extensive account of conducted IVR studies, Suomala and Lyly-Yrjänäinen (2012) also identify a number of challenges related to pursuing theoretical contributions through IVR, including the substantial length of research processes, incentive structures favouring practical results (possibly without a need for theoretical elaboration), the lack of visibility of the theoretical potential prior to committing oneself to working in the field and finding a balance between individual capabilities needed for the different facets (practical/theoretical) of the IVR process.

As it seems evident that although there is no full consensus on the need for, and potential of, IVR to produce theoretically relevant results, it nevertheless becomes clear from the debate that most authors interested in IVR distinguish between the types of relevance – typically by referring to a dichotomy between theoretical relevance and practical relevance. Concerning the core of our paper, it is interesting that authors seem to either explicitly or implicitly hint that placing increasing emphasis on either one of the domains would somehow lead to sacrificing another. This juxtaposing view is analogously present also in the retrospective accounts on critical accounting research as articulated by Neu *et al.* (2001, p. 736): ‘Indeed the cynical might argue that we have emphasized third-party theorizing instead of direct practice, focusing on academic scholarship in “learned” journals where the only contact with the “real world” is mediated through the screen of the reviewers’. This observation leads us to ponder whether, and if so how, it would be possible to respect both of these goals simultaneously and to find a balance within the IVR process that leads not only to practically, but also theoretically relevant results, which would facilitate IVR in management accounting contributing to wider societal debates as well. Applying the taxonomy of intellectual virtues of Flyvbjerg (2001), this leads us to explore whether and how episteme could be combined with *techne* or *phronesis* or both of them. Indeed as reminded by Jarzabkowski *et al.* (2010), there are reasons to understand the relationship between, and the very idea of, theory and practice more dynamically than just representing two opposite elements present in a dichotomy. For Jarzabkowski *et al.* (2010, p. 1194) theories ‘... are living, breathing

guesses, frameworks and general principles that are brought into being as practitioners use and adapt them in their everyday practice'. This view sets the ground for our analysis of the next section, which focuses on the notion of engaged scholarship.

5. Engaged scholarship and IVR

Van de Ven and Johnson (2006) acknowledge the potential tension between theory and practice, but seek to establish a resolution between them without sacrificing either one.⁶ They establish three different frames for understanding the gap between theory and practice and propose a collaborative knowledge production method called 'engaged scholarship' for improving both the relevance of research for practice and the level of scientific knowledge. In other words, they simultaneously share the interest in serving practice and acknowledge the fundamental idea of scientific research as having the obligation to produce new theoretical knowledge. Their analysis proceeds through the explication of three kinds of framings of this relationship.

First, the difference between practice and theory can be framed as a *knowledge transfer problem*. It is understood that the problem has many underpinnings, including the form and content of knowledge produced within research so that the knowledge cannot be expediently applied in practice (Van de Ven and Johnson 2006), the lack of effort, in that researchers pay too little attention to interpreting the results together with practitioners (Mohrman *et al.* 2001) and the ineffective structure of the supply chain for knowledge without necessary intermediaries between academics and practitioners (Starkey and Madan 2001). However, as Van de Ven and Johnson (2006) point out, it is problematic to parse the issue between theory and practice as a knowledge transfer problem as any 'supply chain' we can imagine between the two is not likely to be unidirectional and the worlds that the supply chain might connect and represent distinct virtues of science (cf. Flyvbjerg 2001).

This relates to the second framing, according to which theory and practice can be understood to represent *two separate domains of knowledge*. Following the reasoning of Flyvbjerg (2001), researchers ought to select between being primarily involved in either producing theoretical or practical knowledge – both of the forms having the potential to be regarded as valid and relevant, but representing different contexts and purposes of knowing (Van de Ven and Johnson 2006). However different the content of knowledge may be, Van de Ven and Johnson (2006) suggest that there is a set of criteria that applies flexibly but universally for determining the relevance of knowledge. These include the power of knowledge to describe the events present in a situation, capability to explain and produce answers to 'why' questions, ability to predict and thus set expectations for future events, and the value of knowledge in gaining control over situations and engaging in effective actions. Knowledge is understood to be relevant within a context and related to a situation if all of these criteria (or at least some of them to a certain degree) are met.

Despite this common set of four criteria, regarding the production of relevant knowledge, it is important to identify the difference in how epistemic and practical knowledge is advanced. As explained by Van de Ven and Johnson (2006, pp. 806–7), epistemic knowledge develops '... through a comparison of the relative contributions and perspectives provided by different models' whereas 'practical knowledge advances through a more subjective involvement of one who knows and acts.' So when accepting this view of two separate worlds there is no actual 'problem' between theory and practice – perhaps other than that both would be appreciated in their own right. Reed and March (2000, p. 55) put this somewhat bluntly:

Both the pressure toward relevance and the acquiescence to it are misguided. The main advantage of an academic institution can be found in academic research and its contribution to knowledge. It is not

in trying to identify factors affecting organizational performance, or in trying to develop managerial technology.

While we can appreciate this as a healthy reminder of the importance of having and separating between different institutional roles in society, in the long run, the academe hardly can suffice by disregarding the interconnectedness it may or may not have with other parts of society.

The third framing of Van de Ven and Johnson (2006) – and the one they promote – suggests that theory-building and practice can work together even though there are issues to be addressed in order to accomplish this. In other words, the lack of interconnectedness between theory and practice can be regarded as a *knowledge production* problem – and precisely here the idea of engaged scholarship enters the scene (Van de Ven and Johnson 2006). This involves that researchers should not only ask the right questions and produce practice-based scientific knowledge together with managers, but also put more effort into disseminating the results together (Pettigrew 2001).

The central idea of engaged scholarship is a serious collaboration of researchers and practitioners in generating new knowledge together, thereby producing ‘knowledge that meets the dual hurdles of relevance and rigor for theory as well as practice in a given domain’ (Van de Ven and Johnson 2006, p. 809, cf. Hodgkinson *et al.* 2001 and Jarzabkowski *et al.* 2010). Intellectual arbitrage between the collaborating parties (Harrison 1997) and even emerging conflicts can be viewed as contributing to this process of mutual knowledge production. Engaged scholarship essentially represents an idea of integration: theory and practice are not depicted as distinct worlds, but as complementary aspects of a holistic knowledge production process – the process having a dual aim. One of the aims lies within practice and another within theory (Pettigrew 2001). As Van de Ven and Johnson (2006, p. 809) phrase it:

Instead of viewing organizations as data collection sites and funding sources, an engaged scholar views them as a learning workplace (idea factory) where practitioners and scholars coproduce knowledge on important questions and issues by testing alternative ideas and different views of a common problem.

Thus, the principles of engaged scholarship include those that are capable of bridging interests of practitioners and researcher from the outset to the last phases of a project.

When introducing engaged scholarship in more detail, Van de Ven and Johnson (2006) advise us to identify ‘big questions’, which by definition would motivate all the stakeholders of the research process. How to come up with these kinds of big questions might be a challenge, but it is nevertheless advised that it is better to obtain diverse perspectives of several stakeholders than rely on the cognitive capabilities of a single one – that is the researcher alone. The second principle relates to the way in which an engaged research project is organised. Van de Ven and Johnson (2006) advocate divergent compositions of research teams, however with clearly negotiated roles and responsibilities (cf. Amabile *et al.* 2001). It is highlighted that ‘a lone fieldworker’ model can only seldom work, but that a team of individuals (‘a collaborative learning community’) with versatile backgrounds and experiences is needed for analysing, reflecting on and interpreting the questions and observations related to the on-going study. In addition to collaboration, engaged scholarship favours a relatively long duration of field work, which contributes to building trust between individuals and thus facilitates deeper access into the field. Third, an engaged scholar seeks to maintain a critical attitude when reflecting theoretically on the findings by comparing competing models or theories. While this kind of triangulation is recognised widely regarding various types of data (Yin 1994), Van de Ven and Johnson (2006) extend the call for triangulation to concern also theories. The fourth and final principle of engaged scholarship

claims that while scholarly and clinical roles can be identified as separate entities, they are and should be intertwined in order to promote the production of knowledge that meets the criteria of relevance in terms of practice and theory.

The natural starting point of an IVR process seems to be well in line with the first principle of engaged scholarship as in the outset of an IVR project it is necessary to identify and explicate ‘big questions’ in a sense that they resonate with the interests of several stakeholders: researchers and case organisations – and often also the organisations that provide the researchers with financial resources. Otherwise, it would be extremely difficult to negotiate access to the field and set up the research project in the first place. Furthermore, a continuous evaluation and balancing of interests is valuable throughout the project for keeping the project running smoothly and eventually securing its outcomes. Based on our experience, we support the view presented by Flyvbjerg (2001) that details matter: interventionist researchers might consider it necessary to dig really deep into organisational practices in order to be able to eventually draw a big picture with relevant theoretical underpinnings.

The suggestions made by Van de Ven and Johnson (2006) related to the organisation of engaged scholarship are also in line with good IVR practices. Long duration of field work to secure valid data, and collaborative learning communities within IVR projects are inherent features of good interventionist projects. Most of the IVR projects that the authors are familiar with span from two to five years in duration, and during the life cycle of the project, it is fairly typical that the field researcher(s) will reach a status resembling a full organisational membership (Suomala and Lyly-Yrjänäinen 2012).

In terms of the critical stance towards competing theoretical bases, the interventionist researcher ought to be extremely alert to taking the best out of the project at hand. During a field study, a researcher is likely to face many versatile phenomena that call for rich theoretical understanding and sometimes also willingness to flexibly reposition the research theoretically when something unexpected is emerging. In addition, researcher’s flexibility within the theoretical frame might not be enough. To be able to succeed in IVR, researchers would benefit from a balanced set of efforts to develop not only their theoretical awareness and expertise, but also their social skills and knowledge on the topical challenges present in companies. This seems to be in line with the position by Van de Ven and Johnson (2006) in respecting both the clinical and scholarly roles of researchers.

6. Reconceptualising relevance and balancing the three virtues

We argue that the notion of relevance, which frequently enters the scene when IVR and the theory–practice interface are explored and has been understood in a too narrow fashion in management accounting research: it has served too much to merely juxtaposing theory and practice rather than engendering constructive debate. Practice-oriented researchers have used the notion of relevance as a weapon for challenging more theoretically oriented researchers essentially claiming that they sacrifice relevance while nurturing episteme and the role of theory. On the other hand, researchers emphasising the importance of theory development have sometimes downplayed the aspect of pragmatic relevance with respect to research findings and deliverables. This has resulted not only in a limited understanding concerning the notion of ‘relevant research’ but also – and perhaps more fundamentally – in a lack of convergence regarding how to conduct research so that its relevance could be ensured.

We suggest that key to resolving this puzzle is to acknowledge that relevance as a concept should be conceived much more widely than what has been done so far. We suggest that the notion of relevance should not only refer to the practical usefulness of the findings of an individual piece of research, but that it can equally well be used to describe the epistemic potential of an

entire research stream or understood as its impact on long-term policy development relating to its societal implications. In a nutshell, we argue that ‘relevance’ is a general sign and an attribute of good research, and as a concept it primarily captures whether the research matters or not.⁷ Hence, it does not need to be limited to referring to the extent of direct and immediate pragmatic implications, but research can be relevant in many ways and through many kinds of processes – that sometimes only materialise in the long run. Hence, we suggest an explicit reconceptualisation of the notion of relevance implying that it covers all three intellectual virtues: episteme, techne and phronesis. In this section, we particularly focus on the potential of IVR in this respect by offering guidelines for conducting relevant IVR, as understood in this many-sided fashion.

For reaching a balance between the three virtues, and building more holistically relevant research, the phronetic dimension of IVR projects would deserve increasing attention. In this respect, the state-of-the-art of management accounting research is somewhat diverse. It seems that critical accounting researchers do conduct phronetic inquiry and analysis within research projects drawing from either direct or indirect interventions in practice. As discussed by Neu *et al.* (2001), these studies have potential towards societal relevance, given that they are able to actually facilitate desired outcomes by challenging common sense and by preventing the isolation of academics from other important interest groups in society. In this sense, a phronetic and thereby societally relevant inquiry calls for equilibrium of several issues; it is to a great extent built on the epistemic core of science (since it is the substance that particularly the academics can bring into different social contexts), but it should also be able to operate at a level that makes it possible to resonate with common perceptions – either agreeing or disagreeing with them.

Outside the critical school, IVR in management accounting has predominantly emphasised the impact on local practices and managerial challenges (Suomala and Lyly-Yrjänäinen 2012), thus underscoring especially the virtue of techne and thereby practical relevance. At the same time, epistemic resources and potential – and thereby theoretical relevance – have remained without full utilisation, and a good balance between the three virtues has not been typically achieved within individual studies. A likely major consequence of this is that only a very limited number of published IVR studies have appeared in high-quality accounting journals (notable exceptions including Malmi *et al.* 2004, Wouters and Roijmans 2011 and Wouters and Wilderom 2008). For improving the legitimacy and impact of IVR within academia and elsewhere in society, more effort towards epistemic and phronetic quality of IVR is required.

So how to improve the balance of contributions of IVR for achieving higher societal relevance? By following the guidelines provided by Flyvbjerg (2001), IVR in management accounting could be much more informed by and concerned with emerging needs and practices related to production and use of accounting information in organisations. Especially bearing in mind, the first guideline for PSS offered by Flyvbjerg (2001), i.e. focus on values, interventionist researchers could consider the role and significance of management accounting practices and management accounting information less as a given, and thus seek to establish valid interpretations of them in different circumstances and contexts. In these ventures, it becomes necessary to also address power issues around management accounting techniques and put effort into explicating the role of values within the processes of control. When conducted in dense collaboration between researchers and managers where researchers are primarily responsible for importing theories into the process and practitioners are responsible for bringing topical challenges on the table, IVR can serve as an approach promoting engagement and dialogue on research findings and their practical implications. It can thus represent a forum for ‘polyphonic’ voices to surface (Flyvbjerg 2001).

To illustrate our argument for a balanced approach, we draw from the study by Lyly-Yrjänäinen (2008) on the cost effects of component commonality. It represents interventionist management accounting research that primarily addresses the virtues of techne and episteme.

Hence, it is a rather typical – yet rare – example of published IVR in management accounting. It was conducted in the context of solving a number of practical engineering and accounting-related problems of specific organisations, the field evidence being reflected on the theories of commonality and cost accounting literature. As the study provided several feasible technical approaches for advancing component commonality in an engineering-to-order context and it empirically verified the cost implications of such approaches, the dimension of *techne* was strongly present in the study. However, and what has been generally underdeveloped in IVR so far, the study also set high standards for its epistemic quality. The epistemic potential materialised by explicating how the contextual variables that had been fairly implicitly addressed in earlier commonality literature, have a great impact on the cost effects resulting from increased commonality.

Thus by recognising the quality of the work with respect to two virtues, we do not intend to use the study by Lyly-Yrjänäinen (2008) as an example of unsuccessful IVR in management accounting. Instead, we use the study as a reference point for elaborating on the possibility of balanced approach and the further potential related to increasing emphasis on *phronesis*. In other words, we ask what Lyly-Yrjänäinen's work would have looked like had it been designed more explicitly towards *phronetic* ideas, thereby being better linked to its potential regarding societal relevance, and what could have been achieved by building on a more balanced approach to the three virtues.

We conduct this brief exercise by drawing from and reflecting upon the nine methodological principles offered by Flyvbjerg (2001) for PSS, outlined above in this paper. To begin with, there were a number of strategies in the study by Lyly-Yrjänäinen (2008) that are clearly in parallel with Flyvbjerg's guidance: getting close to reality, emphasising little things, looking at practice before discourse, studying cases and contexts, and asking 'how' as recommended principles convey aptly what was done by Lyly-Yrjänäinen. However, there are four out of nine principles by Flyvbjerg that were not fully present in this study.

First, for Lyly-Yrjänäinen (2008) component commonality as an engineering approach clearly represents a broader agenda of productivity improvement. It is fair to say that improving productivity – and indeed profitability of the focal company – was accepted in the study as a given value. There were no explicit considerations of alternative underpinning values, or possible changes in the systems of values that the commonality developments may have induced. More focus on alternatives – and perhaps somewhat competing – values such as craftsmanship, personal motivation or learning could have produced important insights on the ways component commonality shapes organisations and thus also on managerial implications of commonality. As a result, the analysis could have produced a more comprehensive account on the management of commonality drawing from the positive consequences, but also from the tensions and conflicting interest related to commonality from the perspectives of different individual roles and companies in the supply chain.

Second, increasing commonality was considered in the study in a quite power-neutral way. It was accepted as an element of management's agenda without considering its possible linkages to the ways power is being exercised in the studied environment. This was mainly the case because the management's perspective was dominant in the study. When the employees' or suppliers' perspectives were brought forward, it was done in a relatively power-neutral way, for instance, by addressing how the employees deal with technical expertise required in the process of physical assembly. However, by explicating the relationships between commonality and power the view of commonality as a phenomenon could have been broadened. For example, increased component commonality could have been addressed as a vehicle for exercising power with respect to supplier companies (in fact, increased commonality was a factor diminishing the role of specific suppliers by lowering the mutual dependence) and customers (considering for instance that increased

Table 1. Intellectual virtues and corresponding dimensions of relevance.

Intellectual virtue	Dimension of relevance
Techne	Practical relevance
Episteme	Theoretical relevance
Phronesis	Societal relevance

commonality is likely to decrease the relative bargaining power of customers when negotiating on new deliveries).

Third, Flyvbjerg (2001) advocates joining agency and structure in inquiries. He suggests that practices, actors and structures ought to be studied together in understanding that they are profoundly intertwined. Even though practices and actors were under a very close scrutiny, the process of ‘joining’ was not really happening in the study by Lyly-Yrjänäinen (2008); particularly as the structures where actors and practices were situated were left without comprehensive elaboration. Whereas according to Flyvbjerg micro- and macro-level analyses should be combined not between separate studies but within individual studies in order to understand how structures shape individual choices and which are the structural consequences of individual actions, the analysis by Lyly-Yrjänäinen focused predominantly on the micro (that is firm) level. While this strategy resulted in high relevance in a managerial sense in the local context (by providing managers’ with validated managerial tools), it probably led to some unused potential with respect to broader societal impact and legitimization of social commentary.

Finally, regarding PSS as a dialogue with a polyphonic voice, the study by Lyly-Yrjänäinen (2008) does not differ much from most of the studies in management accounting – perhaps apart from the fact that the developed solutions have been actually implemented in practice and discussed intensively, not only with managers of the case company, but also with executives of other companies facing similar challenges. Indeed, in IVR several voices are inherently present already during the field study phase of the research, and the idea of market tests typical in a constructive research approach (Kasanen *et al.* 1993, Labro and Tuomela 2003) can be understood as one element in IVR that quite naturally serves as a reminder of the phronetic virtue. But realising the phronetic potential of IVR in a broader sense calls for more than polyphonic field research processes. The findings and implications of research could be communicated to broader society using a variety of engagement strategies relying on personal involvement of researchers (Scapens 2012). Also in the case of Lyly-Yrjänäinen (2008), at the time the study was reported, only little was known regarding how the interpretations produced by the research actually can serve as inputs for societal dialogue and practice, but it remained dependable upon the researcher’s future efforts and activities. Making a phronetic impact is thus not only a matter of a single study but a matter of long-term engagement.

7. Conclusions

Our analysis around the three intellectual virtues of Aristotle, which Flyvbjerg mobilises, allows us to conclude that all three virtues – techne, episteme and phronesis – are relevant to IVR (and probably for all social scientists) and that their balanced consideration and use is to be recommended. As for the notion of relevance, we suggest its reconceptualisation, implying a broader understanding than viewing it as relating to the practical dimension only – the two other important dimensions being theoretical relevance and societal relevance. Our analysis essentially leads us to seeing the three intellectual virtues of Flyvbjerg (2001) and the three dimensions of relevance as closely linked and complementing each other (Table 1).

We posit that relevance, when understood in this broader sense, would helpfully add to our understanding as to how the goodness of pieces of research can be seen in a more pluralistic and open-minded light. This three-folded notion of relevance relates to the aspect of contribution, while the other major aspect of the goodness of research is its credibility, encompassing issues like validity and reliability.

We agree with Flyvbjerg (2001) that there is much uncharted room for development in the phronetic dimension of social studies and argue that phronesis fits particularly well to the repertoire of IVR. The phronetic approach is apt to opening new avenues for research that is societally relevant. However, in contrast to Flyvbjerg, we maintain that progress in the dimension of episteme – but understood in a more updated and broader manner than what Flyvbjerg (2001) does – has to be a necessary part of all research endeavours, including IVR. After all, developing theoretical understanding is the eventual *raison d'être* for the academe. For IVR, this leaves several possible viable combinations: techne and episteme, phronesis and episteme as well as techne, phronesis and episteme.

Despite recent signs of increasing attention to IVR in the academe, its current state-of-the-art in management accounting is still somewhat unfortunate in the sense that the intellectual virtue of techne is overly and too one-sidedly emphasised, phronesis is too rarely in the picture and episteme, the corner stone of any scholarly research project, is too seldom sufficiently developed. ‘Social engineering’ types of studies dominate the IVR in management accounting, inherently limiting their theoretical and societal value and relevance. We feel that the starting point for resolving these issues of IVR is to first become conscious of the nature of the problem and then looking for fruitful ways out of it, some of which are outlined in this paper. In particular, we suggest that the agenda of engaged scholarship, completed with employing the idea of phronesis, offers one fruitful avenue for such progress in IVR.

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Notes

1. According to the Oxford Advanced Learner's Dictionary, the word ‘relevant’ refers to (a) something ‘closely connected with the subject you are discussing or the situation you are thinking about’ or (b) ‘having ideas that are valuable and useful to people in their lives and work’. <http://oald8.oxfordlearnersdictionaries.com/dictionary/relevance#relevant>, retrieved 18 October 2012.
2. Actually Aristotle's *Nicomachean Ethics* (1955) includes a broader conceptual system regarding the intellectual virtues than just this three-item classification. In addition to the mentioned three categories, he also distinguished ‘wisdom’ and ‘intellect’ and the relationships between his complete set of five categories are highly complex. In this paper we follow Flyvbjerg (2001) and focus on just the three first categories of Aristotle.
3. The notion of ‘reality’ is philosophically many-sided and challenging and plunging deep into discussions on it does not fit into the scope of this paper. We content ourselves here to suggest reading Flyvbjerg as referring to ‘practice’ or ‘everyday life’, when he talks about ‘reality’.
4. It is questionable whether an IVR study focusing on, for instance, techne would be quite ethical, if the researcher is not convenient with the values that are at stake. In that case the critical label of ‘headless social engineering’ would indeed go to the point.
5. A recent example of the discussion around the question of relevance is the special issue of *QRAM* published in 2012 (9:3) with a title ‘Qualitative approaches to practice-relevant management accounting research’.
6. Van de Ven (2007) is a broader analysis of the same theme.

7. We argue that this broader notion of relevance falls under the concept of ‘contribution’, one of the two major factors when evaluating the goodness of any piece of research. The other major factor contributing to such goodness is ‘credibility’, covering sub-issues like validity and reliability. Cf. e.g. Whetten (1989), Lukka and Modell (2010) and Alvesson and Sandberg (2011).

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