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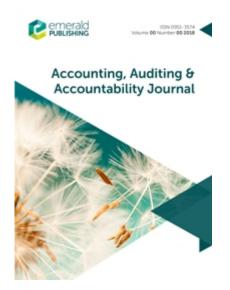
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Accounting, Auditing & Accountability Journal



Understanding Absences and Ambiguities of Post-Decision Project Evaluation in the UK's PPPs: Drawing from the Sociology of Ignorance

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Abstract

Purpose - We explore the under-researched area of post-decision evaluation in PPPs (Public Private Partnerships), focusing upon how and whether Post-decision Project Evaluation (PdPE) is considered and provided for in UK public infrastructure projects.

Design/methodology/approach – Our research design sought insights from overviewing UK PPP planning and more focused exploration of PPP operational practice. We combine extensive analysis of planning documents for operational UK PPP projects with interviews of different stakeholders in PPP projects in one city. Mobilising an *open* critical perspective, documents were analysed using ethnographic content analysis and interviews were analysed using thematic analysis consistent therewith. We theorise the absence and ambiguities of PdPE drawing on the *sociology of ignorance*.

Findings – We find a long-standing absence and lack of PdPE in PPP projects throughout planning and operational practice, reflecting a dynamic, multi-faceted ignorance. Concerning planning practice, our documentary analysis evidences a trend in PdPE from its absence in the early years (which *may* indicate some natural or genuine ignorance) to different levels or forms of weak inclusion later. Regarding this inclusion, we find *strategic ignorance* played a substantive role, involving "deliberate engineering" by both public sector and private partners. Interview findings indicate lack of clarity over PdPE and its under-development in PPP practice, deficiencies again suggestive of natural and strategic ignorance.

Originality/value – We draw from the *sociology of ignorance* vis-à-vis accounting's absence and ambiguity in the context of PPP, contributing to an under-researched area.

Keywords: Public Private Partnerships (PPP), Post-decision Project Evaluation (PdPE), Ignorance, Absence, Ambiguity, UK

Paper type Research paper

1. Introduction

From the late twentieth century, PPPs have been a preferred policy choice to deliver public infrastructure and related services in many jurisdictions (Hodge and Greve, 2017). Their widespread adoption echoes the international promotion of New Public Management (NPM), entailing change from traditional public administration practices to private sector management techniques and financing (Hood, 1991, 1995). PPPs are viewed as a NPM development aimed at satisfying increasing demand for public infrastructure by incorporating private finance (Broadbent and Laughlin, 2004). According to HM Treasury (2019), by March 2018 UK PPP projects totalled 704, with a combined capital value of £57 billion. Aggregate expenditure for these projects was estimated as reaching £188.35 billion by 2050. Globally, McKinsey (2017) highlights a public infrastructure deficit, with annual spending needs estimated at \$3.7 trillion. In this context, PPP is seen as an important delivery mechanism.

Nevertheless, an arresting question arises concerning what we know about PPP performance, including about what is considered success for PPPs (Hodge *et al.*, 2018). PPP's introduction and subsequent promotion were underpinned by assumptions including relieving pressure on public capital budgets, Value for Money (VfM), risk-sharing and development of management expertise (Broadbent and Laughlin, 1999; Shaoul *et al.*, 2007; Wall and Connolly, 2009). Throughout the policy's existence it has remained unclear whether anticipated/promised outcomes have materialised (National Audit Office, NAO, 2018). Concurrently, one reason analyses of PPP performance have been scarce is the lack of comprehensive ex-post evaluation guidance/frameworks in academic, policy and practice arenas, which has detrimental implications for exercising democratic and public accountability (Andon, 2012; Shaoul et al., 2012; Stafford and Stapleton, 2017; Hodge et al., 2018; Whitfield and Smyth, 2019).

Ex-post evaluation of PPPs has long been an under-developed research area (Broadbent *et al.*, 2004; Edwards *et al.*, 2004; Andon, 2012; Helby Petersen, 2019). We respond to this by exploring the planning and operation of Post-decision Project Evaluation (PdPE) in UK PPPs. Hodge and Greve (2017, p.64) stress that there are so many relevant dimensions involved that most evaluation efforts are less than holistic: they "do not for an instant contemplate such a complex task" but concentrate on specific performance dimensions/criteria considered of particular importance. While ex-post evaluation can take different forms (EPEC, 2018), our specific focus is on PdPE, a key and under-researched type of evaluation. According to policy proposals, this occurs at the project level and assesses a range of financial and non-financial outcomes. PdPE addresses the questions: Has the project delivered objectives established in initial (pre-decision) planning? What can be learnt to improve delivery and strengthen future decision-making? (see, e.g., National Health Service, NHS, 1994; Department of Health, DoH, 2002; HM Treasury, 2013, 2018a,b).¹

PPPs incorporate various policy forms and organisational structures. We focus upon the significant case where PPP relates to long-term infrastructure contracts (Hodge and Greve, 2005). It is exemplified by the UK's Private Finance Initiative (PFI)², which remains the most common descriptor of this policy in the UK and is considered the most developed or advanced form of PPP globally (Broadbent and Laughlin, 2004).

The motivation for our study is found in Broadbent and Laughlin's (2004) concerns about the prospects for PdPE in PPP projects:

¹ We acknowledge here that for us this type of evaluation can engender betterment through enhanced democratic accountability. Beyond government and civil service documentation to this effect, many academic perspectives are consistent with the promotion of and indeed articulation of principles of design for similar evaluation (see Broadbent et al., 2003, 2004; Edwards et al., 2004; Andon, 2012; Shaoul et al., 2012; Stafford and Stapleton, 2017; Helby Petersen, 2019; Koopenjan et al., 2022). This is not the same as assuming that this will engender a *perfect* system.

² In British PFIs, a design-build-finance-operate (sometimes including ownership/transfer) model is incorporated into a 25-30 years' contract signed between a public authority and a Special Purpose Company/Vehicle (SPC/SPV), established by a consortium of private sector partners, to deliver public infrastructure.

"Considerable effort has been expended in the UK in formulating pre-decision criteria for considering a PFI but little progress has been made in deciding how to evaluate the project once it is on its (up to 60-year) contractual journey. This is important; having exhaustively explored whether to pursue a PPP, it seems almost irresponsible to fail to analyse whether predicted outcomes actually occur" (Broadbent and Laughlin, 2004, p.8).

Our paper confirms an apparent lack of attention to PdPE, including lack of a comprehensive and clear framework, and further finds this not only evident in projects' initial planning but also in operating projects (Oliveros-Romero and Aibinu, 2019). With PPP an increasingly unpopular policy in the UK, lacking in rationale and evidence to support its continued implementation (Hellowell and Pollock, 2009; Hellowell *et al.*, 2019; Smyth and Whitfield, 2017), we question whether this absence is something of an oversight or a strategic decision indicating accounting evaluation's political character (e.g., Gallhofer and Haslam, 2003). Reflecting on prior studies, mobilising an open critical perspective we drew from the *sociology of ignorance* as a lens to theorise absences and ambiguities of PdPE in UK PPPs.

Ignorance typically entails lack of knowledge but can also be considered a deliberate ploy (Proctor and Schiebinger, 2008). A small but growing literature on the role of ambiguities, ambivalence, absences, undecidables and uncertainties in various contexts has examined variants of ignorance (Smithson, 1993). In accounting, Pianezzi and Ashraf (2022) recognise accounting's absence as key in relation to ignorance (see also Catasús, 2008) and draw from the sociology of ignorance to show how ignorance can be exploited. Baudot and Cooper (2021) draw on appreciation of modes of discursive ignorance (Rayner, 2012; McGoey, 2019) in theorising responses by different regulators to pressures to prescribe accountings. Ravenscroft and Williams (2021) theorise the emergence of strategic uses of ignorance in an interested and problematic petrifying of academic accounting. Ignorance has been linked to negative impacts on organisational management and accountability (Killian, 2015; Miley and Read, 2021; Roberts, 2018, if the latter's specificities, in focusing on internal governance, must be appreciated). These studies influence ours, while we develop themes for our specific focus and seek to pursue the openness promoted in Laughlin (1995). By exploring the dynamics involved in the absences, inconsistencies and ambiguities in PdPE in PPP projects, we consider whether ignorance is reflected as a lack of awareness as the PPP policy emerges (something like genuine ignorance), a deliberate strategy or a mixture of both. Thus, we reflect upon ignorance vis-à-vis the planning, design, regulation and operation of PdPE.

The paper is structured as follows: section 2 garners insights for PPP's ex-post evaluation research agenda through contextual appreciation and reviewing related previous literature and policy documents; section 3 elaborates our rationale for drawing from the sociology of ignorance, including discussion of strategic functions of ignorance; section 4 delineates and justifies the data collection and analysis methods deployed; section 5 presents our findings; section 6 discusses the findings; finally, section 7 concludes the paper.

2. PPP and PdPE

In the UK, PPP's official rationale has changed, from, in the 1990s (the early years), serving as a macro-fiscal device to reduce government borrowings to, from around 2000, a mode of micro-procurement offering VfM (Broadbent and Laughlin, 2004; Edwards *et al.*, 2004). However, prior research evidence questioned the promises over cost, efficiency, flexibility and financial returns (e.g., Shaoul *et al.*, 2008; NAO, 2018; Acerete *et al.* 2019; Whitfield and Smyth, 2019), indicating the need for robust and comprehensive PPP ex-post evaluations. As Andon (2012) and Helby Petersen (2019) conclude, lack of inquiry into the operation of PPPs post-financial closure leaves a substantial gap in our knowledge.

2.1 An undeveloped/under-researched agenda

By the new millennium, as the earliest PPP projects entered operational stage, researchers highlighted ex-post evaluation concerns. Broadbent *et al.* (2003, 2004) stressed that, compared to the multitudinous studies on PPP's pre-decisional stage, there had been little focus on PdPE. Broadbent and Laughlin (2004) add this issue to those identified in Broadbent and Laughlin (1999) and propose a five-theme research agenda concerning PPP's nature and development, including PdPE. Andon's (2012) systematic review of accounting-related literature on PPPs confirms a continuing paucity of research addressing PdPE:

"...there is an opportunity here for researchers to take the lead, driving structural, policy and procedural debate to stimulate development in ex-post evaluation practices associated with PPP..." (pp.892-3).

A small number of studies have sought to contribute here. Broadbent et al. (2003) suggest a design for PdPE by examining the first 17 NHS PPP projects reaching the Full Business Case (FBC) stage, drawing on pre-decision processes, post-decision project intentions and evaluation theory. They conclude PdPE should be proactive: focusing on unique PFI elements to address achievements by considering quantified costs and transferred risks whilst illuminating how shared risks are managed; engaging with stakeholders' qualitative viewpoints concerning broad-scope evaluation including non-financial, cultural and operational perspectives. English et al. (2010) also sketch an operational evaluation system. These two studies have different rationales and logics but their design suggestions reflect several similar concerns and agree in some key respects. Specifically, English et al. (2010) emphasise assessment based on the three Es (economy, efficiency and effectiveness) for judging VfM, having some affinity with Broadbent et al.'s (2003) emphases on the need to focus on unique PPP elements. On assessing effectiveness, English et al. (2010) stress a need for putting effort into coaching and mentoring for improvement rather than just compliance and accountability, echoing English's (2007) finding that 'performance auditing' in certain Australian regions mainly focuses on compliance with pre-contracting procedures rather than actual ex-post attainment of objectives initially motivating PPP choice. Meanwhile, English and Baxter (2010) note development in PPP contracts for Australian prisons towards greater emphasis on collaboration and trust between state and private contractors and promotion of flexibility, while poorly specified/omitted written content continued.

English *et al.* (2010) considered internal evaluation necessary but insufficient for assessing the *three Es* for operational PPP projects. This fuses with English's (2007) earlier finding of failure across Australia to maintain sufficient independent external scrutiny and public accountability for PPPs. Further, after investigating the Skye Bridge PFI's collapse in Scotland, Shaoul *et al.* (2011) indicate that a lack of transparency rendered difficult ex-post external, independent scrutiny of the project. Tracking and evaluating scheme performance were not possible, potentially engendering mistakes in policy-making and public expenditure (Shaoul *et al.*, 2011). Similar concern was expressed earlier by Shaoul *et al.* (2007): their evidence-based policy review concluded there was no public, independent post-implementation review of PFI especially in terms of going beyond a narrow understanding of costs/benefits to involve broader socio-economic issues. They support Broadbent *et al.*'s (2003) suggestion that expost evaluations should incorporate non-financial, cultural and operational perspectives.

Despite the early research interventions, there remains a lack of robust and systematic evaluation of PPPs at either project or programme level (NAO, 2009): more recent reviews and studies continue to highlight that PdPE in practice is still lacking locally and internationally (see Acerete *et al.*, 2019; Helby Petersen, 2019; Shu *et al.*, 2021). Helby Petersen (2019) highlighted that, among the limited empirical PPP evaluations, the focus has been on financial performance, while evidence on quality of infrastructure facilities/services and related broader issues is almost non-existent. This, again, emphasises the need to explore how/whether PdPE is properly designed and delivered in PPP practice.³

2.2 PdPE-related policy literature

PdPE, while under-researched in the academic literature, is not totally absent from government regulations/guidance, even if it is not highlighted therein. The earliest indication of PdPE, after PFI's 1992 introduction, came in the NHS' (1994) *Capital Investment Manual* (CIM), which introduced the purpose of PdPE as:

"...to improve project appraisal, design, management and implementation...It is a learning process and should not be seen as a means of apportioning blame...Evaluations need to be...in the hands of chief executives and other key decision-makers without delay." (NHS, 1994, p.3).

The CIM clarified PdPE as mandatory in certain cases. Projects with costs above £1 million should be evaluated and FBC approval should not be given without planned PdPE (NHS, 1994, pp.3-4). DoH (2002) also indicated PdPE should be costed throughout the planning stage:

"...[PdPE]...must be included in...overall project costs...[when]...the business case is developed...Experience from the NHS and other organisations...both public and

³ We searched for literature that, in relation to PdPE, used constructs with a strong parallel to PdPE but scarcely any literature was found. One study referred to 'Post Completion Audit' (PCA) in relation to PPPs but this amounted to a tangential remark in a study of PCA in India that did not include any substantive or extensive consideration of PCA in relation to PPPs. Other parallel constructs are discussed in the main text. We found that substantive interpretation allowed us to treat such constructs and PdPE as interchangeable.

private...suggests...up to 1% of...[project capital cost]...should be allocated for evaluation" (p.21).⁴

While the CIM is not policy guidance specifically for PPPs, it provides the first indication that PdPE should be considered and undertaken in the planning and operational practice of major public NHS projects, including PPP contracts.

Further guidance is provided through the central government's Green Book (including guidance on appraisal and evaluation).⁵ Over nearly half a century's development, the Green Book has often been revised. Recent editions (HM Treasury, 1997, 2003, 2018a) did not include the term 'PdPE' in the main part, where the tendency is to refer abstractly to 'evaluation', including it only in supplementary guidance (HM Treasury, 2013, 2018b). The 1997 and 2003 editions define evaluation as a "...retrospective analysis of a project/programme/policy to assess how successful or otherwise it has been, and what lessons can be learnt for the future" (HM Treasury, 1997, p.97; 2003, p.102). In the latest edition, evaluation is "...systematic assessment of an intervention's design, implementation and outcomes" (HM Treasury, 2018a, p.110).⁶ Successive editions consistently relate evaluation to monitoring. Earlier editions see monitoring as core in performance management: effective monitoring means tracking all benefit categories, generating necessary information for evaluation (HM Treasury, 1997, 2003). HM Treasury (2018a, p.53) explicitly integrated monitoring and evaluation, with both seen as using "...a mixture of qualitative and quantitative methodologies to gather evidence and understand different aspects of an intervention's operation" (p.53). The boundary between monitoring and evaluation here is unclear, potentially fostering misunderstandings vis-à-vis PdPE and project monitoring in PPP practice.

A consistency throughout different Green Book editions is that evaluation should be integral to project planning from the start: "...evaluations should be planned, costed and provided for as an integral part of the proposed intervention..." (HM Treasury, 2018a). PdPE is explicitly covered in the supplementary guidance (HM Treasury, 2013, 2018b), which indicates PdPE should be a preliminary consideration for the Strategic Outline Case (SOC), and that the PdPE plan should be prepared in the management case⁷ at both Outline Business Case (OBC) and FBC stages. It defines PdPE's purpose as twofold:

⁴ DoH (2002), complementing NHS (2009), updated the CIM's PdPE section, if without substantial change. It also clarified that PdPE for certain NHS projects should be planned: "...Business Cases for capital projects will not be approved unless...[PdPE]...has been properly planned in advance and suitably incorporated..." (p.1).

⁵ The Green Book, widely referenced in PPP literature (e.g., Froud and Shaoul, 2001; Heald, 2003; Broadbent *et al.*, 2003; Broadbent and Laughlin, 2004; Edwards *et al.*, 2004; Shaoul *et al.*, 2011), "...has in...earlier incarnations for decades steered UK government policy makers and economists towards monetised analysis of costs and benefits for major projects...setting out approved techniques and defining approaches to key appraisal and evaluation issues such as long-term discounting" (HM Treasury, 2018b, p.101).

⁶ An intervention is a project, programme or policy being evaluated (HM Treasury, 2018a).

⁷For HM Treasury (1997), consistent with DoH (2002): "...as part of the management process, planning...evaluation should be considered at...time of appraisal". Despite changes between versions of the Green Book/supplementary guidance, the PdPE-related part remains sketchy and substantially unchanged

"To improve project delivery through lessons learnt during the project delivery phase...often referred to as the Project Implementation Review (PIR)...to appraise whether the project has delivered its anticipated outcomes and benefits...often referred to as the Post Evaluation Review (PER)" (p.83).

There is little further on how the PIR or PER should be conducted, only a few lines denoting that the PdPE framework should outline management arrangements for ensuring PdPE, and that expected PdPE timescales should be planned, with individuals responsible for delivering such arrangements appointed (HM Treasury, 2018b).

Looking beyond the UK, a similar pattern is evident. For example, the European PPP Expertise Centre (EPEC) report, entitled *Ex-post assessment of PPPs and how to better demonstrate outcomes* (EPEC, 2018), focuses on ex-post performance auditing, stating this "... differs from performance evaluation, which looks to verify whether or not the planned intervention had both the expected effect and was the right thing to do to achieve it" (p.12).

Overall, these policy guides, whether explicitly or implicitly covering PdPE, offer preliminary understandings of the role of PdPE, which should be part of developing and planning projects from the start and is important for successful and transparent management of public resources. However, there is a lack of substantial guidance for defining and planning PdPE: a lack of clarity, elaboration and consistency regarding what PdPE is, how it is to be undertaken over various stages, and who is responsible for organising and conducting related activities.

The above policy context helps us appreciate a concern of the UK Public Accounts Committee (PAC): "It is unacceptable that after more than 25 years the UK Treasury still has no data on benefits to show whether the PFI model provides VfM" (PAC, 2018, p.5). For the PAC (2018), highlighting the lack of PdPE and absence of historical data leaves a gap in our understanding of PPP success and related implications. Scarcity of robust PPP evaluation data is echoed by others (Verhoest *et al.*, 2016; Shu *et al.*, 2021). The PAC (2018) advances a reason for the scarcity: "data on the benefits of PFI does not exist, and to collect retrospective data against credible counterfactuals across the entire stock of projects would be a huge amount of work and a significant expense" (p.10).

Thus, PdPE deficiency in PPP is suggested in research and government guidelines/regulations. Appreciation of PdPE's absence is indicated and there is ambiguity about it in practice and policy discourses. The above concerns motivate us to contribute to an under-researched area.

Accounting literature has highlighted absence and ambiguity of accounting in other domains. Jacobs and Kemp (2002), Belal and Cooper (2011) and Bouten and Everaert (2015) link accounting absence to lack of knowledge/awareness, the role of social/state institutions, crude instrumentalism and fear of bad publicity. Killian (2015) and Miley and Read (2021) indicate negative consequences ensuing from absent accounting/accountability. Catasús

throughout. For HM Treasury (2013, 2018b), the 'Five Case Model', encompassing strategic, economic, commercial, financial and management cases, is a framework for developing and presenting the business case.

(2008) articulates constraining and constitutive dimensions of (forced/necessary) accounting absence. Munro (1995) and Christensen (2004) indicate the value of accounting absence/ambiguities in terms of flexibility for those seeking to enhance control. Research into accounting and blame allocation/avoidance has made parallel claims (see Mortensen, 2013; Skaerback and Christensen, 2015).

Reflecting on the prior discussion of PdPE and the literature on absence/ambiguity, the growing interest in a sociology of ignorance is insightful for framing appreciation of PdPE absence/ambiguity. In relation to PdPE, for instance, we can explore the meaning of its absence/ambiguity in terms of whether it represents a 'genuine' and/or strategic ignorance, the latter indicating ignorance as a deliberate act. We understood, then, that we could theoretically contribute to appreciating absence/ambiguity of PdPE for PPPs through drawing from the sociology of ignorance as well as contributing through new empirical research to an under-researched area. Next, we elaborate further on the sociology of ignorance and how it can enhance understanding of PdPE.

3. Insights for PdPE absence/ambiguity through drawing from the Sociology of Ignorance

"Knowledge is a big subject. Ignorance is bigger. And it is more interesting" (Firestein, 2012, p.2). Ignorance abounds, endures, is ubiquitous and persists. We are all implicated by our own ignorance. Ignorance constantly weighs on us. For DeNicola (2017), "the persistence of ignorance can be viewed as a reflection of our fallen state, a shameful weakness of will, or a sin of epistemic laziness" (p.3). This indicates that ignorance goes beyond unknowns. It has multiple properties varying with different circumstances or intentions and can be actively cultivated and consciously manipulated. We briefly discuss the nature and strategic functions of ignorance and further suggest the appropriateness of drawing from the sociology of ignorance in the study of PdPE in PPP projects.

3.1 Ignorance's character

Ignorance is a subtle and contested concept. Ferrier's philosophical exploration of ignorance, key in the *New Scottish Philosophy* (Keefe, 2007), builds upon understanding ignorance as knowledge deprivation, articulating it as intellectual defect, imperfection, privation and shortcoming (Ferrier, 1854). Through this lens, ignorance is not only absence of knowledge. Its lack also signifies want of knowledge, indicating ignorance might be remedied (see DeNicola 2017).

Some researchers regard ignorance as a negative concept implying absence or loss (see Catasús, 2008; Killian, 2015). DeNicola (2017) constructs a notion of ignorance by exploring the concept's negativity and paradox, considering negativity as more than emptiness and ignorance more than mere absence or negation. We can paradoxically gain knowledge about ignorance.

In accounting, there are positions consistent with Ferrier's (1854) implication that ignorance signifies want of knowledge (a genuine/natural ignorance) and DeNicola's (2017) related view

that ignorance indicates a capacity to learn. For Laughlin (1987), our ignorance is aggravated by dominant technical views of accounting at work in organisational accounting systems design, while a 'quasi-ignorance' stage is the starting point for exploring accounting's emancipatory potential. Tinker (1985) points to ignorance of accounting's social roots.

The above insights enlighten our analysis and discussion of PdPE's absence in PPP projects from two perspectives. Firstly, a lack of attention to or absence of PdPE in project documents may, to some extent, reflect what might be termed a natural/genuine ignorance. During PPP's early years, there may have been a lack of foresight concerning continuous evaluation of infrastructure projects with a life of over 25 years. As the Institute of Public Policy Research (2001) suggested, at project initiation many years must pass before PPP policy/project outcomes can be appreciated. Any definitive VfM judgement would have to await a more thorough long-term evaluation. Secondly, we can see ignorance as a lack of knowledge and therefore remediable, revealing a capacity to learn.

The absence of current PdPE arrangements might have resulted from a lack of expertise when PPP projects were initiated. As the policy enters its fourth decade, this position is no longer tenable. To move beyond this and better fulfil the potential insights (including emancipatory) from appreciating ignorance (DeNicola, 2017), we must better understand the difference between genuine/natural ignorance and strategic ignorance (Roberts, 2018).

3.2 Questioning ignorance's "naturalness"

"Ignorance hides in the shadow of philosophy and is frowned upon in sociology" (Proctor and Schiebinger, 2008, p.2). If ignorance's substantive nature is lack of knowledge, ignorance has never been a simple and innocent term, especially sociologically. Having both friends and enemies, ignorance could arise for a myriad of reasons, consciously or unconsciously. Proctor and Schiebinger (2008) emphasise a need to question ignorance's 'naturalness', making three distinctions: "ignorance as native state (or resource), ignorance as lost realm (or selective choice), and ignorance as a deliberately engineered and strategic ploy (or active construct)" (Proctor and Schiebinger, 2008, p.3). The first distinction corresponds to 'natural' ignorance. This sub-section explores the other two distinctions, drawing from different research findings.

Ignorance can be deliberately engineered and strategic. Beck (2009) develops a typology focusing on actor intentionality and works with the construct of wilful ignorance, a conscious inability to know. Discussing the tobacco industry's efforts to evade causal linkage between smoking and cancer as archetypal, Rappert (2012) stressed strategic ignorance's vital importance for social research. Labelling 'ignorances' or 'negative knowledges' as 'strategic', Roberts (2018) speaks to how they are often regarded as products of intended or purposeful action (see Rappert, 2012).⁸

⁸ Ignorance has been found useful in predicting risk. If an unpredicted threat manifests, authorities feel justified demanding more resources to surpass earlier ignorance (McGoey, 2012b). Similar logic has been found in identifying and controlling PPP risks (Broadbent *et al.*, 2008). Quantitative risk estimation has dominated PPP planning. Qualitative concerns including uncertainty recognition are downplayed, even where recognised. This reflects decision-making anxieties (Broadbent *et al.*, 2008).

Further, strategic ignorance can entail incorporating ambiguity. Rappert (2012) explores ignorance's usefulness to UK government officials facing public censure and outrage over high civilian death rates during the Iraq war. A key government strategy was stressing the unreliability of arriving at exact numbers of civilian/non-civilian deaths. Here, ambiguity was an asset rather than a liability for officials seeking to justify the war and limit responsibility for escalating death tolls.⁹ Best (2005, 2008, 2012) explores how World Bank and IMF policy-makers sought alternately to dispel and magnify ambiguity when implementing new policies, including entailing standardisation, or defending established ones. Through fostering future flexibility in interpretation, ambiguity is often used strategically by those best positioned to benefit from fluidity in possible interpretation of their decisions.¹⁰

The above indicates how ignorance can be strategically manipulated with serious implications. For Rayner (2012), deliberate ignorance is an unavoidable tactic for organisations and individuals whose self-survival is contingent on maintaining a selective understanding of their own deficiencies and liabilities. This clarification echoes Proctor and Schiebinger's (2008) second as well as third distinct kinds of ignorance.

Exploration of ignorance's social usefulness has been elaborated in a small number of accounting studies. Ravenscroft and Williams (2021) articulate how strategic use of ignorance has helped sustain a problematic narrow fixity in the accounting discipline especially in the North American academy. Roberts (2018) explores interaction between ignorance's strategic functions and organisational transparency in a multi-faceted study of internal governance. Baudot and Cooper (2021) draw from the sociology of ignorance in elaborating how discursive modes of ignorance may allow regulators/regulated to manage accounting rulemaking they are uncomfortable with (Bailey, 2007; McGoey, 2007, 2012a,b, 2019; McGoey and Jackson, 2009; Rayner, 2012; see also Hancher and Moran, 1989; Flyvbjerg, 2003).

The above suggests that the sociology of ignorance can be drawn upon in understanding absences and ambiguities of ex-post evaluation vis-à-vis PPPs. Influenced by Laughlin's (1995) *middle range thinking* appreciation of theory and methodology, we sought to pursue a perspective both appreciative of critical insight into PdPE absence/ambiguity and of how a sociology of ignorance helps illuminate this *and* is reflective of a concern in our empirical research to be open to the field.¹¹ We turn now to our research method.

⁹ Regarding the ex-post evaluation agenda for PPP projects, evidence suggests that only some quantification concerns with related uncertainties in the pre-decision stage are given visibility. Qualitative concerns such as uncertainty recognition can be downplayed and there is a consciously manufactured ignorance in not attending to qualitative risk-sharing (Broadbent *et al.*, 2008).

¹⁰ Ignorance, as can be argued for stupidity, may also entail a socially or psychologically adaptive mechanism (Croissant, 2014). Stupidity often has an 'Orwellian' double-speak effect in political discourse where stupid masquerades as smart (Burt, 2005, p.30), highlighting a moral dimension (Garcia, 1997). Catasús (2008, p.1005) reflects similar argumentation, drawing on "...conventional wisdoms in management accounting (e.g., 'you get what you measure', 'what gets measured gets managed', 'you cannot manage what you cannot measure')" to explore accounting absence. Roberts (2018) reflects similarly on management and accountability in organisations with performance measurement systems (see also Killian, 2015).

¹¹ Laughlin (1995) sees the critical theory he pursues as 'middle range' on three continua. One of these is at one extreme open to finding things out in the relatively unstructured sense, e.g., of grounded theory and at the other extreme is driven by theory as if dogma. We seek to avoid such extremes in our research.

4. Research method

4.1 Empirical context, overview of design and data source

The empirical analysis here involves analysis of planning documents for PPP projects and analysis of in-depth interviews of different stakeholders (from both public and private sectors) of operational PPP projects in a large UK city with substantial experience of PPPs. This research design was specifically developed reflecting our concern to get an overview of PdPE during the planning stages of PPP projects and then to explore these findings and related concerns in more detail with managers and stakeholders of operational PPP projects. The choice of Snowfield as the case-example was a product of seeking a geographically contained area with a suitable number of active PPP projects where access to interviewees could be secured (in line with Berry and Otley, 2004).

4.1.1 Documentary data

For our document analysis, we collected four project document types: the FBC, the OBC, the SOC/initial agreement (IA),¹² and the main body of final contracts. There are key reasons for this. Transparency, as long recognised, is a key concern for PPP research (Shaoul *et al.*, 2011, 2012; Stafford and Stapleton, 2017). Business cases and contracts constitute the only PPP project documentation publicly available, albeit constrained and subject to commercial confidentiality (Shaoul *et al.*, 2008). If relevant policy guidance has encompassed certain requirements on ex-post evaluation of capital projects, including PPPs (section 2.2), such evaluation-related information can hardly be found. For example, Gateway review reports, advised by the Office of Government Commerce (OGC, 2007) as important external evaluation evidence, have scarcely been released, raising concern about whether the reviews occurred (Edwards *et al.*, 2004). Further, as the Green Book (HM Treasury, 2013, 2018b) indicates, the key roles of PPP business cases and contracts signify that they are expected to provide information to inform future PdPE practice at ex-post stages. We elaborate on the role and characteristics of such project documents below, further justifying their usefulness for exploring PdPE.

Generally, for large UK procurement projects, the government advocates developing the business case through three stages: the SOC/IA; the OBC; the FBC. The SOC is a brief preliminary document introducing the basic project concept with enough detail to support an informed decision on proceeding to an OBC. The OBC requires more comprehensive analysis to demonstrate assessments of strategic fit, costs, benefits, risks, funding and necessary management arrangements for successful scheme delivery. The FBC is meant to provide information required for the decision to award a contract and is composed prior to financial closure and contract award. It establishes detailed management arrangements for successful delivery, monitoring and evaluation (HM Treasury, 2018b). In the PFI context, the contract identifies "…services to be delivered and establishes key performance indicators that typically include aspects of performance management, output measurement and management reporting…to enable…robust assessment of contracted performance" (Stafford and Stapleton,

¹² The IA (the term is particularly used in Scottish NHS PFI projects) acts like the SOC.

2017). Contracts are also supposed to represent a form of public transparency about projects (Reynaers and Grimmelikhuijsen, 2015).

Collecting these documents was a lengthy and challenging process. PPP disclosure has long been an issue. Previous PPP studies noted that business cases and contract documentation may not be publicly available for commercial confidentiality reasons (Shaoul *et al.*, 2008). We experienced similar challenges. Collecting began in autumn 2017, and data was constantly enlarged and renewed as more documents were uncovered. We made full use of public resources, collecting documents from various formal and informal portals: e.g., resources published on official websites of central/regional Governments, local councils and trusts, private companies' and investors' webpages and PPP-related social groups' websites (e.g., of forums, unions and relevant social campaign organisations). There were also disclosures released by devolved governments (most notably the Scottish) or local authorities, following requests made by the authors and others under the Freedom of Information (FoI) Act 2000.¹³

In total, 123 documents were collected covering 103 PPP projects (between 1995-2016).¹⁴ Most were FBCs/OBCs, with just 22 contracts (covering relevant provisions), 5 IAs and 2 SOCs (Table 1). These documents come mainly from education and health (Table 2).

Туре	FBC	OBC	Contract	SOC/IA	Total
Number of	53	41	22	7	123
documents					

Table 1. Number of different types of documents

Sector	Education	Health	Transport	Waste	Other	Total
Number of documents	48	50	9	9	7	123

Table 2. Documents by sector

4.1.2 Interview data

For the interviews, we focused on one English city, Snowfield¹⁵, identifying seven PPP contracts operating within the city in diverse sectors, covering education, transport and office accommodation (Appendix A provides details). Snowfield is one of the largest regional English cities with a significant population. The city has a large public sector workforce, with the Snowfield City Council (SCC) among the major local employers. Compared with smaller local authorities, SCC has broader and longer experience in collaborating with private finance to deliver public services,¹⁶ including but not limited to PPPs. The earliest PPP contract was signed in 2001 and SCC has worked with PPPs for two decades.¹⁷

¹³ Our two Fol requests (two authorities) yielded little. Hodkinson (2011) managed to get *some* information from Fol requests for a local case. It is difficult to determine whether or not publicly available documents are due to Fols, unless the portal from which the documents are obtained states it.

¹⁴ The documents are made up disproportionately of Scottish PPPs. Around 60% of business cases, and most contracts, cover Scottish projects. This reflects the different attitude of the devolved Scottish government which made a public interest policy choice to publish (some) relevant PPP project documents.

¹⁵ Anonymised to preserve interviewee anonymity, the city was empirically rich, constituting an appropriate case for in-depth study.

¹⁶ Interview with Emily, an Executive Director at SCC.

¹⁷ Besides the PPP contracts discussed, SCC has also worked with private partners/contractors for household waste disposal, HR, payroll and IT.

A purposive sampling approach was used to identify potential initial interviewees. Subsequently, a snowballing technique was deployed in garnering further interviews in the sense that we asked interviewees to suggest colleagues they felt would be useful participants (see Saunders *et al.*, 1997; Bryman and Bell, 2014). Interviews were conducted over January to August 2019. We conducted 15 interviews involving 17 participants comprising 10 public sector officers/managers and 7 participants from private sector partners (see Appendix B). Participants either worked directly on PPP projects, serving as contract or project managers, or were closely involved in PPP administration, including some in-charge strategically of PPP-related public services. All interviews were semi-structured, partly drawing on emergent themes from the document analysis, and on average lasted between 60-90 minutes (four approached 120 minutes).

4.2 Data analysis

The planning documents were analysed to gain an overview of the status of PdPE before the PPP projects' operationalization. Interview transcripts from the Snowfield case were subsequently analysed. We elaborate upon the analyses below.

To analyse the large set of planning documents, Nvivo 12 software¹⁸ was employed, and a qualitative analysis was conducted, based on the Ethnographic Content Analysis (ECA) approach (Altheide and Schneider, 1996), where a feature is the researcher's role in constructing meaning, typically entailing applying predefined categories to empirical data but allowing greater potential to refine and create new categories. Specifically: "...ECA follows a recursive and reflexive movement between concept development-sampling-data collection-data coding-data analysis-interpretation. The aim is to be systematic and analytic but not rigid" (p.16). This method was found useful because our dataset was updated frequently as new documents were obtained. The situation required us to go back and forth, constantly revisiting and refining codes/themes. Analysis was not a one-off task but a lengthy continuous process. ECA allows as many movements back and forth between collection, analysis and interpretation as required. This is particularly helpful when, as here, documents lack clear, standard structures or wording (see Section 5).

The ECA involved firstly documents being read through one by one from beginning to end to develop understanding of project backgrounds, objectives and impacts. More familiarity with the structure, layout and key components of the documents was garnered. Preliminary codes regarding PdPE were gradually identified. Concurrently, we drew from a few pre-defined categories, summarised from the literature, to check if they were included. A brief codebook was prepared with successive refinements. Relevant codes include 'Post Project Evaluation', 'benefits realisation plan', 'benefits register', 'project monitoring', 'post-implementation reviews', 'payment mechanism', 'performance monitoring', 'investment objectives', 'contract management', 'gost award contract management', 'Gateway Review'.

Then, the ECA's focus was on PdPE-related contents. Going back and forth, we continuously compared and refined identified codes. The most relevant and frequent codes were 'Post

¹⁸ NVivo supports qualitative and mixed methods research. It is designed to help researchers analyse relatively unstructured qualitative data.

Project Evaluation', 'benefits realisation plan' and 'performance/project monitoring'. We next tried to build connections between different themes and explain identified situations and problems concerning PdPE.

Seeking to build on insights from the document analysis, a semi-structured interview approach was followed, with open broad-ranging discussion encouraged. The interviews encompassed three discussion areas and the process entailed a progressive step-by-step approach so that exploration in the later discussion areas built upon the earlier, deepening the insights garnered. In this way, the first area concerned whether PdPE exists and how participants understood the term. The second explored what participants' thought of PdPE's status (including any absence/lack in planning/practice). The third covered more in-depth opinions, e.g., how PdPE is needed, why any absence/deficiency occurs, what are related difficulties.

All interviews were transcribed by professional transcribing services and analysed through a thematic analysis approach involving many readings (one of the researchers painstakingly doing this while the other two checked the results of this). While Nvivo was used to analyse the large set of documents, given the smaller sample and the nature of material as interviewee perceptions, all interview transcripts were analysed manually. In conducting the thematic analysis by reference to the discussion areas, we were concerned to be open to the data in the sense of regularly and iteratively revisiting it and refining themes each time (Thomas, 2011). This process led to the arrangement of the data by the following themes related to the above-mentioned discussion areas: perceptions and understanding of PdPE's manifestation, recognition of PdPE issues or deficiencies, opinions on why issues/deficiencies arose. We then further categorised evidence under each theme (detailed in Section 5.2). We thus gained insights into issues around PdPE's lack in current, operational PPP projects.

5. Findings

This section presents findings from our document analysis (5.1) and interviews (5.2), which we subsequently discuss.

5.1. Document Analysis: Absence and issues in planning practice

Before moving to detailed analysis of the documents, we note two initial insights. The first concerns the textual structures and patterns of our collected documents. Different project document types displayed divergent forms, with little systematic structure or form. These documents exhibit a degree of fracture (entailing key missing items) and obscurity. For example, some pages concerning detailed payment information/accounting treatments were missing or redacted. In a few cases, we found whole sections or chapters absent with only a heading remaining.

The second concerns our focus on PdPE. Information on this is limited in the collected documents (Table 3). Specifically, PdPE is completely absent from contracts. In SOCs/IAs, there is no substantial inclusion of PdPE. Most PdPE information is found in FBCs and OBCs though PdPE information is not found in all cases. Absence of PdPE in SOCs/IAs is not so

surprising. In policy guidance (HM Treasury, 2013, 2018b), PdPE is not specifically mentioned vis-à-vis SOCs, but for OBCs and FBCs, there is some prescription for PdPE to be included.¹⁹

PdPE	FBC	OBC	SOC/IA		Contract	Total
Inclusion						
Number	26 from 53	12 from 41	5 from 7		0 from 22	43 from 123
Including						
% including	49%	29%	71%	(but	0%	35%
			insubstantial sam	ple)		

(Table 3. PdPE inclusion in different document types)

Overall, PdPE sections in these FBCs/OBCs are either short paragraphs or 1-2 pages lacking unified logical flow or comprehensive framework. PdPE information seems to be a routinely or typically neglected part of the documents, with definitions or descriptions often intermeshed with other terms such as Benefits Realisation and Project Monitoring. Below we explore the changing perceptions of PdPE.

5.1.1 A developing PdPE trend: from absence to limited inclusion

This sub-section outlines a developing PdPE trend. Of the 94 O/FBCs, 38 included PdPE (1997-2016). To better illustrate this trend development and changes, we present quantitative (in the sense of quantifiable changes over time) and qualitative findings.

Appreciation of quantifiable changes over time from documents

Our first line of enquiry was to find the most direct and visual embodiment of PdPE, the number of documents mentioning or including it. We found this number clearly increases over three different periods, pre-1997, 1997-2005 and post-2005, as elaborated below.²⁰

We have O/FBCs for three projects signed pre-1997. None mentioned PdPE. Among our collected O/FBCs signed between 1997-2005, around 20% (6/31) included PdPE, either just mentioning it or including it with very limited content. Among the FBCs signed post-2005, more PdPE inclusion is evident (53%, 32/60). While inclusion displays diverse levels of understanding there is growing awareness of a need to bring PdPE into PPP projects. One might initially suggest that this reflects early natural ignorance of PdPE vis-à-vis PPP.

Time span	Pre-1997	1997-2005	Post-2005
PdPE's inclusion in	0 out of 3	6 out of 31	32 out of 60
O/FBCs			
% including	0%	20%	53%

Table 4: PdPE's inclusion in different timespans

Qualitative appreciation from documents

The second line of enquiry was to explore detailed content included in the documents. This encompasses exploring changes in how PdPE was included (content, coverage) over the three timespans.

 $^{^{\}rm 19}$ We return to PdPE's absence from contracts later.

²⁰ We saw 1997 as the first demarcation point: the New Labour government had rebranded PFI as PPP and aggressively pursued the policy (one Minister, Alan Milburn, stating PPP was "the only game in town", quoted in Bidgood, 2012), resulting in a dramatic increase in UK PPP projects. We saw 2005 as the next point, with our data indicating a clear increase of PdPE inclusion thereafter.

The earliest documents mentioning PdPE were two 1997 FBC documents. One mentions PdPE in relation to overall project management but without explanation or detail. The other has a section entitled 'Post-Project Evaluation' but then simply states: "...a plan for monitoring...progress and completion of the project, and for evaluating the outcome following implementation will follow shortly" (Victoria Infirmary NHS trust Mearnskirk Hospital Redevelopment PFI FBC, p. 31).

From 1997-2005, when PdPE was included it was mentioned very cursorily as something being planned in two of these cases and was subordinate to 'performance monitoring' and intermeshed with 'benefits realisation' in the other four.

Post-2005, most projects start to include relevant PdPE arrangements in their planning documents and as more than just a vague mention. Often it is integral to independent sections of usually 2-3 pages. For example, regarding role and purpose:

"[PdPE]...is the process of assessing the impact of the project...in operation, or after it has come to an end. It provides an opportunity to: Assess the impact of performance and make improvement; Assist in achieving best VfM; Enable improved decision-making; Use the lessons learnt for the future development" (Oxford University Hospitals Trust FBC, p. 91).²¹

From this example, a learning role of PdPE is observed. Meanwhile, projects (especially healthcare projects) generally identify 3-5 main PdPE stages, often referencing the CIM (NHS, 1994) and DoH (2002):

"The key stages for undertaking a...[PdPE]...are set out as: Stage 1 – Procurement process evaluation; Stage 2 – Monitoring the progress of the project; Stage 3 – Review the project outputs; Stage 4 – Initial evaluation of the service outcomes; Stage 5 – Follow up evaluations" (Redevelopment of Salford Royal Foundation Trust site FBC, pp. 169-170).

The narratives above provide *relatively* detailed understanding of the basic role, impact and importance of PdPE in PPP schemes. They show increased attention to PdPE, including more clearly defining it, compared with the previous two decades. They go further to incorporate Post Project Audit, Cost and Time Study, Performance Study and Project Feedback into PdPE. Concurrently, only a few lines clarify brief arrangements or expectations on Audit, Studies or Feedbacks. Yet, ostensibly, developments show growing awareness of PdPE's role, indicating a going beyond the apparent earlier ignorance of it.

5.1.2 Some problematic emergent cases in relation to PdPE

This section presents issues emerging from our document analysis. Given the limited information in O/FBCs, we include relevant government reports from HM Treasury and the NHS to further identify concerns.

²¹ See another example: "The...[PdPE]...would be implemented...to determine the project's success and learn from any issues encountered. It will also assess to what extent project objectives have been achieved, whether time and cost constraints have been met and...value for money" (New Gorbals Health and Care Centre FBC).

A contrast from healthcare

From our document analysis, healthcare has the highest proportion of projects referencing PdPE, which might reflect that the NHS has more detailed policy requirements vis-à-vis PdPE (see section 3.2 above). However, there is still a question concerning actual planning practice. Specifically, government mandated that all NHS capital projects costing over £1 million should plan for PdPE in their business cases, otherwise approval would be withheld (NHS, 1994). If many healthcare PPP projects from the later period include PdPE (to different extents), considering that the 1994 CIM pre-dates most of the PPPs one should question why there are still projects (with costs exceeding £1 million) not including PdPE at all. For example, of the four NHS PPP projects over 1995-1997, only one mentioned PdPE and that was limited to a section title in its FBC document (Mearnskirk Hospital Redevelopment PFI). A similar situation continues in later projects, with little more than 'PdPE' in the table of contents and perhaps a sentence indicating PdPE will be conducted without elaboration.

While this paucity of PdPE referencing might partly reflect natural ignorance (DeNicola, 2017) during PPP's early years, if we reflect upon the above examples and healthcare's relatively more developed PdPE regulations, we find indications of a selectively cultivated ignorance.

Overlaps and obscure boundaries

PdPE and related constructs of benefits realisation and performance monitoring are often intermeshed without clear boundaries between them.

A first example comes from a group of FBCs from the late 1990s-early 2000s. In these FBCs, PdPE is simply equated to benefits realisation, placing both constructs under the umbrella of the general performance monitoring plan:

"Performance monitoring includes the following two key components: 1) *Post project evaluation or benefits realisation* to assess on a continuing basis whether the Council has met its strategic policy objectives; 2) Performance monitoring to assess the quality and standard of delivery of the services...provided by the Project Company throughout the life of the project" (Aberdeenshire Council Oldmeldrum and Banff School PPP FBC, p. 82; East Renfrewshire Council School PPP1 FBC, p. 49; Midlothian Council School PPP1 FBC, p. 60; Perth & Kinross Council Office Accommodation PPP FBC, s. 11.3).²²

Without defining or explaining either PdPE or benefits realisation, these FBCs mix the constructs and without reflective consideration move to the post-completion project management plan. The simple message is that the purpose of undertaking PdPE/benefit realisation is to measure whether public authorities' initial objectives for the PPP project have been achieved. There is no further detail on PdPE in the remaining parts of these FBCs, leaving obscure whether PdPE and benefits realisation can be mutually substituted, what the properties of performance monitoring are and whether monitoring and evaluation in post-decision project stages should be differentiated.

²²The exact same wording is used in these documents. Interviewees noted their awareness of consultants working alongside local authorities and schools to submit the business cases: the identical wording could result from 'copying and pasting' (Kevin, Asset Manager, SPV).

More recently, even though there appears to be more PdPE-related content in project documents, it is still integrated with benefits realisation and/or monitoring arrangements:

"The benefits identified within this FBC will be monitored and evaluated during...development of the project and post-completion via...[PdPE]...to maximise...opportunities for them to be realised" (Maryhill Health Centre FBC, p. 81).

"...[PdPE]...also sets in place a framework within which the benefits realisation plan can be tested to identify which benefits have been achieved and which have not – with the reasons for these understood in a clear way" (East and North Hertfordshire combined heat and power OBC, p. 66).

From the above, it seems benefits realisation lies within PdPE's ambit (and is central to such evaluation), contradicting the earlier position equating PdPE and benefits realisation. The overlap, mixing, imprecision and ambiguities within project management documents, in effect permitted by the regulations, is noteworthy and significant. Ambiguity and vagueness may facilitate flexibility and negate effective regulation, resonating with a sociology of ignorance. We return to this in our discussion.

Some informative arbitrary statements

 Further to the above-identified ambiguities, we also encountered arbitrary statements. We found projects regarded PdPE as only to be considered after the contract's end:

"Following satisfactory completion of the project...[PdPE]...will be undertaken..." (Eastwood Health Centre OBC, p. 96).

Concurrently, there are projects conveying the message that PdPE ends 2-3 years after commencing operations:

"...[PdPE]...of the project will not be finalised until...completion of the building works and around three years of the operational running of the new facilities and service models" (Birmingham New Hospital FBC, s. 19-1).

"A...[PdPE]...report will be called for some two to three years after taking occupation...The focus...on whether the building is performing satisfactorily...meeting needs..." (New Stobhill Hospital and New Victoria Hospital ACAD Centres FBC, p. 79).

Other projects overemphasised procurement vis-à-vis PdPE:

"The focus of the...[PdPE]...will be the evaluation of the procurement process" (Maryhill Health Centre PPP Combined O/FBC, p. 83).

From the above, projects can ignore or be unaware of the long-term continuous feature of PdPE, despite policy guidance (DoH, 2002; HM Treasury, 2018b) requiring follow-up PdPEs throughout the whole project life-cycle.

We encountered other arbitrary statements indicating a complacent attitude towards operational evaluation of PPPs. There are documents stating that most project benefits can be realised through procurement itself. For example, the following text (verbatim) appears in several PPP project documents:

"...the Council's objectives in undertaking the Project are outlined earlier and then summarised in the form of benefits attributable to the project. *Most of these benefits are expected to be realised through the procurement process itself* and...monitoring arrangements will further support...benefits realisation" (Aberdeenshire Council Oldmeldrum and Banff School PPP FBC, p. 82; East Renfrewshire Council School PPP1 FBC, p. 49; Midlothian Council School PPP FBC, p. 60).

Relatedly, other arbitrary assertions are evidenced by assumptions made concerning benefit realisation:

"Assuming...the scheme goes ahead as planned, the benefits will be automatically generated", (Victoria Infirmary NHS Trust, p. 29).

The statements suggest, firstly, a lack of basic understanding (or manifest misunderstanding) of PdPE's nature; secondly, excessive focus on procurement (perhaps driven by overwhelming financial considerations), with long-term project management and evaluation substantially omitted. Overall, we identified recklessness towards PdPE throughout the planning stage, with complacency about the future and an effort to strategically avoid or minimise future liabilities by making definite predictive assertions. The situations reflect dynamics integral to deliberate ignorance as identified by Rayner (2012) and Rappert (2012).

The complete absence of PdPE in contracts

We expected to see PdPE arrangements or intentions in the 22 project agreements/contracts collected, as a contract is considered to have the most comprehensive and detailed information on project operation and management. However, we found none of the contracts included a PdPE plan.²³

Without including PdPE, these contracts do incorporate detailed information on specific performance monitoring, and the monitoring tasks described are tightly linked to payment mechanisms. Key elements are deductions for service shortfalls, helpdesk system operations, stipulation of times for remedy and data provision (monthly reports). In HM Treasury (2007), PdPE is not considered, but the guide provides detailed requirements on how to monitor service provision based on the payment mechanism (Chapter 10). Thus, at contractual level, most project management efforts build upon financial considerations. HM Treasury (1997, 2013, 2018b) and the CIM (NHS, 1994) indicate the need for PdPE but it is not treated as a contractual obligation.

5.1.3 Summary of document analysis

Summarizing key findings from our document analysis, first, the different document types had different levels of PdPE content. PdPE was absent from contracts/project agreements and SOCs/IAs did not mention it substantially, while O/FBCs held varying amounts of relevant information. Our analysis also found that as PPP developed so did PdPE content: before 2005

²³ Contracts did not mention PdPE even if some PdPE-related information may have been mentioned in business case documents for the project. For example, in Perth & Kinross Council's Office Accommodation and Car Parking PPP project's FBC document, PdPE was encountered in a section titled 'Benefits Assessment and Post Project Evaluation', but the contract included no relevant PdPE information.

only around one-quarter of planning documents mentioned PdPE in any form whereas after 2005 there was greater engagement, even if it might be just one sentence. The planning documents, if containing most of the content, were still characterised by absences: sometimes, content only included titles/headings for sections/chapters. Where there was more content it was mainly ambiguous, often intermeshed with performance monitoring and measurement processes and/or the project's overall benefits realisation. We also encountered some surprisingly arbitrary assertions, indicating recklessness, or a complacent attitude towards long-term project management and evaluation. These situations together embody a complex, multi-dimensional ignorance (Proctor and Schiebinger, 2008).

5.2 Interview findings

As explained in Section 4.2, interviews explored three themes in a step-by-step progressive manner. From our review of prior studies and our document analysis, we already appreciated the potential relevance of ignorance and ambiguity as concepts in theorizing these phenomena but, following a semi-structured interview approach, we asked open questions reflecting these themes, aligned to our broad discussion areas, and sought to gain in-depth insights from interviewees. The section below is therefore structured in line with these three themes: perceptions and understanding of PdPE's manifestation and character in practice; recognition of issues in or deficiencies of PdPE in practice; opinions about why such issues/deficiencies were arising.

5.2.1 Perceptions and understanding of PdPE's manifestation and character in

practice

Only two interviewees, one from the public and one from the private sector, and both experienced individuals, understood the substance of PdPE. The public sector interviewee clearly indicated that substantive PdPE was not manifest in practice:

"Most of the PPPs or PFIs I've been directly or indirectly involved in have been a twenty-fiveyear deal. And there's never been, not that I've experienced, an...[ex-post evaluation]...There's been a lot of work...[in terms of the key dimensions...before the contract comes into operation]...However...once the contract is in place...there has been very little...[post-evaluation]..."(Oliver, SCC Director)²⁴.

Two public sector and three private sector interviewees, in contrast, saw PdPE as something done only at the end of the project's life:

"When you are talking about post project evaluation I am wondering because I am not aware of any PFI projects that have finished their life-cycle" (Robert, SCC Facilities Manager).

Other interviewees, when asked about PdPE, were initially prompted to mention practices other than PdPE that they understood in terms of ex-post evaluation, these corresponding to performance monitoring mechanisms:

²⁴ We take 'very little' here, given the earlier use of 'never been', to indicate Oliver's strong sense that in effect there has been no ex-post evaluation done; so 'very little' amounts to nothing.

"...for that post evaluation, there are literally hundreds of performance mechanisms...A lot of the outcome measures are tied to the financial penalty" (Emily, SCC Executive Director).

One private sector interviewee noted:

"I would say, the way the contract was written, there was not a review at a regular interval such as an...annual evaluation...but we do monthly and quarterly monitoring reports..." (Jose, Senior Project Manager, FM provider).

Regarding the term PdPE itself, interviewees had either not heard of PdPE and/or had no practical experience of it. Private sector participant comments were consistent with public sector participant comments here: "...we do not use...[PdPE]...as the term..." (Adam, Operations Manager, SPV); "I have not heard of evaluation...in...[PdPE]...terminology..." (Kevin, Asset Manager, SPV). And private sector participants tended more than their public sector counterparts to refer to performance monitoring (including payment mechanisms) and contractual requirements.

Concerning ambiguity and absence, it appears most interviewees from both public and private sectors themselves indicate (whether consciously or not) a lack of clarity about PdPE's meaning. Also our interviewees indicated PdPE absence. PdPE was not a common practice, as became clear in most interviews after PdPE was explained as an evaluation separate from performance monitoring and related practices (e.g., benefits realisation). We explore this further below.

5.2.2 Recognition of issues in/deficiencies of PdPE

We showed interviewees some business cases collected in our document analysis, reflecting the relationship of the two methods and the holistic nature of our research design. This allowed interviewees to grasp the nature of PdPE. Interviewees then confirmed from their own experience PdPE's absence or minimal nature in planning documents and in practice:

"I don't know why it...[reference to PdPE in a Business Case]...is just a few lines..." (Adam, Operation Manager, SPV).

"Just three pages...it is a very small construction, and they are actually talking mostly about benefits. They defined lots of benefits but how are there going to review and evaluate it? That should be a big part, or the biggest...for me" (Larry, Contract Manager, FM provider).

Interviewees acknowledged PdPE was something needed and important and acknowledged the difference between PdPE and performance monitoring and benefits realisation.²⁵ Some even criticised the mixing-up (explained in 5.1.2):

"...to me...these...[instances of benefits realisation]...are very much physical things; something like 'the design for space...includes provisions for special needs teaching', well...that you got some rooms/equipment for special needs or whatever...doesn't mean it's good educationally

²⁵ Benefits realisation and performance monitoring were illustrated for interviewees here by reference to documents (see 5.1.2).

for those kids. Once it has been built, it's only boxes-ticked but not an outcome evaluation." (Emily, SCC Executive Director).²⁶

Further, interviewees were shown statements in planning documents that we termed arbitrary above. For example, statements indicating PPP projects yielded most of their benefit at procurement diminishing the importance of ex-post evaluation (see 5.1.2). Interviewees challenged such statements:

"It's not going to be realised by the procurement. It would be identified or defined before the actual running, but...would only be realised through operating...You can't realise...[benefit]...until you've done the operation and the maintenance" (Sam, Asset Manager, SPV).

Beyond responding to prompting by reference to planning documents/guidelines, interviewees further indicated their recognition of PdPE deficiencies by relating to their actual PPP running experience:

"I think that's where it's a problem, honestly. Because what should be happening that hasn't happened is that there should be...constant evaluation, maybe on an annual basis...I think regular monitoring of the performance happens in every...[PPP]...but in terms of post evaluations, I'm not aware of what's happening" (James, SCC Director).

Another SCC manager also acknowledged:

"I would probably agree with you that what we spend most of the time...[on is seeking to ensure]...we get what we pay for. So, although we do manage...contracts and we do monitor...benefits as...set out there, we probably don't spend enough time looking at the wider benefits...from this type of contractual arrangement" (Michael, SCC Project Finance Manager).

From the above, interviewees not only recognised the absence of PdPE, but also raised concerns about this. Such concerns were also expressed by private sector interviewees, highlighting that "...they should do evaluations for every single PFI because what we actually need is knowing how we are doing, what works, what doesn't work, and...reasons..." (Larry, Contract Manager, FM provider).

5.2.3 Opinions about why the issues/deficiencies arose

Having elaborated how PdPE was perceived and how absence and deficiencies were recognised, we explored how the phenomena and issues were interpreted.

²⁶ Oliver (SCC Director) similarly distinguished between these concepts/arrangements: "No, I don't think they are the same. Performance monitoring is very much within the confines of that contractual arrangement, checking if there's a defect...and if the contractor has to pay the penalty...As for benefits realisation, it is, for example...Did we actually get the school? How many jobs were created through...construction...? Did we get those new facilities? We tick the box and say OK...done. However, in terms of...[PdPE]...it is a whole...for instance...how much the cost really is, what relationships are like, what the service delivery level is. I think you're finding that there is less talk about those things. So, what they're doing was not evaluating."

Two broad explanations emerged from analysing the interviews. First, PdPE's absence was politically motivated. This explanation was mainly advanced by public sector interviewees and related to the operating environment and structures they work within. PdPE's absence reflected various parties (local public bodies, central government departments and national political parties) wanting to avoid embarrassment that may arise from poor evaluations:

"People actually don't want to do that sort of evaluation because sometimes it can cause political issues. People want to save face. They made...[decisions]...It might show...the decision-making wasn't the best...to re-evaluate in such a way might...[show]...that the decision...[was]...wrong at the beginning" (Oliver, Director of City Centre Development, SCC).

Private sector interviewees could express similar views on avoiding evaluation:

"...to me, it's that people are being *ignorant*...people not wanting to understand it" (Roy, senior project manager, SPV).

Some interviewees went further in raising questions about what central government departments were doing when they signed off on planning documents, including contracts, where PdPE was often absent or ambiguous. For example, a SCC manager stated:

"...[a]...central government department...[signs]...off these business cases. Why are they not looking at that and going...'It doesn't look like they've written much...[about PdPE]...there. I'm not sure...they're going to be able to measure these benefits?" (Amelia, SCC Commercial Contract Manager)²⁷.

Second, PdPE deficiency reflected a lack of expertise, resources and funding. Inadequate expertise was particularly raised with reference to poor planning practice and was especially seen to happen in the public sector. Public sector interviewees themselves reflected:

"It is really hard for somebody like me, who is a commercial manager, to sit...[here]...and think, goodness me, how are we going to evaluate the benefits? ...we would have to get a set of consultants in..." (Amelia, SCC Commercial Contract Manager).

Emily, an Executive Director at SCC, put it in blunt terms for an earlier time when most PPPs were signed that relatively small councils were like "lambs to the slaughter with a massive company like...[the SPV]". Specifically:

"The point I am making is, public sectors were not used to externalizing contracts or...their work and managing that. For bigger councils, it was about late 1990s when we were first doing this and we had to go out and...[get]...some people...I am imagining when smaller councils did this, they could hardly afford it and apparently, they were not getting enough expertise..." (Emily, SCC Executive Director).

Such a situation was confirmed by private sector interviewees, with the indication that commercial consultants would mainly focus on securing business case approval and funding

²⁷ Also the PFI Representative at SCC.

for the PPPs. This perhaps also explained why so little is written about PdPE and why there were substantive instances of identical wording:

"There is a type of company that works alongside local authorities and schools to submit these. Because a school hasn't got the time to write all this...[and]...local authorities, they won't even have a clue about this. I think the company comes in and writes it to try and help the school and the local authority get the funding, definitely" (Kevin, Asset Manager, SPV).

Some private sector participants raised the issue about the lack of technical expertise available to public bodies for PdPE to be carried out:

"... a lot of the time, they... [the public sector] ...haven't got the technical people there, or they haven't got enough people. A lot of the PFI monitoring teams do other things...And there's a lot of chopping and changing. So...you get somebody...say he's done three or four years, and they'll just disappear, and you will lose that knowledge..." (Roy, Senior Project Manager, SPV).

Regarding lack of resources and funding, this is particularly evident in PPP projects' operational stage. The interviews occurred towards the end of a decade of austerity including extraordinary cuts in English local government funding. Thus, the issue of who would fund any PdPE exercises was prominent in interviews. Amelia (SCC Commercial Contract Manager) explained the pressures they were under:

"My team are having to manage seven big PFI contacts, and we have a load of other stuff to do...It means you...can...only spend so much time managing these contracts...a lot of authorities are in the same position because we're under huge budget pressures at the moment."

This was echoed by other public sector interviewees. Roy summarizes neatly many participants' position on PdPE: "...evaluations could be very useful, but who is going to pay for it for a start?"

Reflecting on the above, interviewees conclude that the problem with PdPE's absence is that "...nobody actually stops to say, hang on a minute, let's evaluate the whole...if it's still what we wanted in the first place" (Oliver, SCC Director), and "...we're all culpable for not paying enough attention to that" (Amelia, SCC Commercial Contract Manager).

We now turn to theoretical discussion of the absence and ambiguity found, utilizing the sociology of ignorance.

6. Discussion

Drawing from the sociology of ignorance to theorize PdPE's absence in PPP project planning and operation, we reflected Proctor and Schiebinger's (2008) recognition of ignorance's multi-dimensional nature in our analysis. For Proctor and Schiebinger (2008), ignorance can be a native/natural state but also a 'selective choice' or even a 'strategic ploy'. The following discussion explores the developments in changing perceptions of PdPE from two aspects: ignorance as natural state and ignorance as a selective choice or active construct.

From absence to natural ignorance

The document analysis firstly explored PdPE's trend over different timespans. This analysis indicated development in PdPE from almost complete absence in the 1990s, into some limited mention of it by around 2000, then into it being given an independent section in project documents more recently. This is supported in both quantitative and qualitative analyses above. Reflecting on this, in the early years there may be at least some natural ignorance about PdPE explaining its absence or scarcity due to limited experience of or expertise in PPP. Later, with PPP's maturity, more awareness of PdPE and its potential role and importance is evident. Though understandings of PdPE are still inconsistent and vague, initial natural ignorance has apparently been gradually reduced or displaced.

In previous literature, accounting absence has been theorised, even if this is under-developed (Catasús, 2008; Killian, 2015). Some researchers consider absence a "negative presence" or a gap which can aid horrifying social practices, as seen in Killian (2015). From our research, absence can also be seen as indicating at least a degree of natural/genuine ignorance where phenomena are in their infancy, with PPP documentation and PdPE planning developing as the policy matured.

However, if the early years' findings indicating natural ignorance, there are difficulties with this rather benign view. First, the CIM, with guidance on the need for PdPE, pre-dated most PPP projects. PdPE was (and is) not a practice unique to PPPs and had been identified as necessary for pre-existing capital projects before introduction of the PPP policy. Second, evidence that some PPP project documents included a heading for PdPE, but little content, shows awareness of the need for PdPE but lack of engagement with what it entailed.

These difficulties indicate some willful ignorance vis-à-vis PdPE even in the early years. For Beck (2009), such ignorance is associated with a particular intentionality, a conscious inability to know. It is further indicated where an interviewee asks why, given central government departments must sign off on the documents, O/FBCs were approved without PdPE. This suggests that conscious decisions by relevant departments are being made.

For us, willful ignorance is adopted and cultivated by both public and private sectors, with submission and approval of these incomplete O/FBCs. We found no evidence of any party calling out PdPE's absence from planning documents. Conscious as well as natural dimensions of ignorance helped engender ambiguities in project planning arrangements throughout the first two decades of PPPs' existence. From our interviews, issues at projects' planning stages have had a knock-on effect at operational stages.

The absence may be linked, then, to an interest in displacing meaningful democratic accountability regulation. Similar interest is found in earlier critical appreciations of accounting absence (see Jacobs and Kemp, 2002; Belal and Cooper, 2011; and Bouten and Everett, 2015). We further consider ignorance as strategic, active construct next.

Ignorance as strategic, active construct

We found evidence reflecting ignorance's social usefulness often related to ambiguities, undecidables and uncertainties (Smithson, 1993). For Rayner (2012), deliberate ignorance is

an unavoidable strategy or tactic for organisations and individuals whose self-survival is contingent on maintaining a selective understanding of their own deficiencies. This is indicated throughout our findings.

PdPE's complete absence from our collected contracts (5.1.2) indicates a conscious ignorance. PdPE is considered at the early planning stages indicating an intention for evaluation throughout the project's life. Further, PdPE is compulsory for NHS FBCs' approval. This indicates that PdPE should be considered a contractual obligation. Thus, absence of PdPE in *contracts* suggests that PdPE inclusion in *planning* is just a pretence or form of charade, and one mutually agreed by both public and private partners. In this regard, the ambiguous statements addressed above (5.1.2) foreshadowed PdPE's subsequent absence from contracts. Inconsistency or pretence here suggests a conscious choice whereby organisations benefit from ignorance, utilising it to exempt themselves from possible future responsibilities or liabilities. This point was supported by our interview findings, with participants advancing the idea that no party to the project wants evaluation in case that engenders (political) embarrassment and highlights error and misjudgement in the initial decision.

If absence can play a strategic role vis-à-vis ignorance, a relationship between ambiguity and strategic ignorance is also highlighted in our findings. Rappert (2012) illustrated how the death toll in the Iraq war was manipulated by the British government to keep the population ignorant of the military action's consequences. Our findings share similarities with Rappert (2012), especially concerning ambiguity and the overlap between ex-post management arrangements and PdPE. PdPE content for projects was mixed with processes of performance monitoring, penalty fines and benefits realisation (see 5.1.2, 5.2.2). The impression left from this is that PdPE was minor relative to the direct, day-to-day processes that may engender penalty fines (direct cash payments).

This downplaying of PdPE is a form of displacement, entailing suppression of important accountability regulation. A possible motivation to displace development and design of more comprehensive PdPE process is indicated by our interviewees: project document wording is often apparently crafted by private sector partners (or consultants) with an economic self-interest motivation; undertaking PdPE, even if only once every 5-7 years of a project, adds potential cost, reducing returns. We find evidence reflecting this, with the same wording and structure manifest in several project documents.

We perceived similar ambiguity in policy-level guidance, where there is also less than clear demarcation of project monitoring, benefits realisation and evaluation. As noted in 3.2, Treasury guidance on business case development (HM Treasury, 2013, 2018b) indicates that one purpose of undertaking PdPE is to examine whether the project has delivered anticipated benefits. Moreover, the Green Book (HM Treasury, 2018b) mixes 'monitoring' and 'evaluation' together (see p.51) in effect conveying the message that project monitoring and evaluation are inherently intertwined. Here, again, precision is lacking. With no substantial instructions provided under these general guidelines, ambiguity more easily manifests, which might contribute to the chaos in project documentation we identified. Such ambiguity was also referenced in the interviews with public sector participants where they recognised that benefits realisation and performance monitoring cannot replace PdPE.

Natural ignorance here may help explain overlaps and ambiguities. Obscure boundaries between key project arrangements in policy-level guidance may build vagueness and lack of clear, workable requirements. However, ambiguity in policy guidance opens the door for intentional flawed practice (Croissant, 2014), offering implementing bodies the chance to blur boundaries of project arrangements. We found performance monitoring was used, sometimes distorted, to cover for lack of attention concerning PdPE. The private sector takes advantage of ambiguity to avoid making specific plans for either benefits realisation or PdPE, mixing them in together. The private sector interviewees highlighted that this ambiguity is also given cover by PdPE's absence in project contracts, especially when financial deduction (penalty) processes are, in contrast, well developed.

Meanwhile, recklessness is evidenced in arbitrary assertions (5.1.2) that deem most benefits realised through procurement itself or automatically arising as the project runs as planned. Also, complacency related to the strategic choice of maintaining ignorance is evident. For our participants, such complacency led to efforts to 'save face' by choosing not to look back to review decisions or processes. Such deliberate choice suggests stupidity-related ignorance, which, as Croissant (2014) indicates, entails a socially/psychologically adaptive mechanism. Such stupidity involves a moral dimension (Garcia, 1997) and is often utilised in public discourse to avoid responsibility (see Burt, 2005).

Reflecting on the above, both public and private sectors appear interested in the manifest absence and ambiguity. Part of this interest may also be seen in terms of a logic of blame avoidance, perhaps most clearly from the perspective of the government policy-maker and regulator (Mortensen, 2013; Skaerbaek and Christensen, 2015).

7. Concluding reflections

We contribute here to the literature at the interface of PPPs, accounting and ignorance. First, we contribute empirically, showing absence of, and ambiguity in relation to, PdPE in UK PPP projects. We acknowledge that Oliveros-Romero and Aibinu's (2019) study overlaps to some extent with the current study in terms of its findings (knowledge about PPP ex post evaluations is rare, with specific evaluation methods still unknown or at least insufficiently publicised), although we add substantially more empirical analysis and build on method and theory.

The last point links to our second contribution here, which is to develop the literature on PdPE in PPPs further by theorising our empirical findings. We argued that the sociology of ignorance and particularly the constructs of *natural* and *strategic* ignorance help frame the absence and ambiguity reported in our findings. The sociology of ignorance can be employed usefully in further studies of accounting absence and ambiguity, to elaborate not just their existence but also how knowledge and ignorance are intertwined and work in practice (Rappert, 2012).

Our third contribution is to the sociology of ignorance literature and how different elements can be seen to work in practice. We expand the literature's understanding of ignorance by highlighting the relationship and the tension between absence and natural ignorance, and ambiguity and strategic ignorance. We understand ignorance to be dynamic, changing over time, even when it is applied to the same subject (PdPE in our case). Our study argues that, while natural ignorance may have had a role at the outset, strategic ignorance is present early in the life of PPP policy and projects, and becomes more evident over the decades as PPP policy and projects continue.

This understanding of a dynamic relationship between natural/genuine and strategic ignorance in the context of an on-going (controversial) public policy answers Pianezzi and Ashraf's (2022, p. 21) call for investigations into "…how genuine ignorance interacts with strategic ignorance in manufacturing the 'public' interest".

To summarise, we indicate natural ignorance in PdPE absence, reflecting policy/model novelty, but there is also deliberate ignorance leading to strategic manipulation of PdPE-related information and arrangements throughout project planning becoming apparently more significant in operational practice (paralleling the perspective of Roberts, 2018, where management is portrayed as knowingly and actively cultivating a self-serving ignorance). PdPE in practice reflects and involves a dynamic mix of natural and strategic ignorance, with different emphases over time.

We can extend the above logic by recognising that PPP has been highly contested since the mid-1990s. This hostile policy environment has been generated by campaigns from trade unions, analysis by think tanks and politicians' advocacy. Researchers have often concluded that "[i]nvestment through PFI cannot, in and of itself, lead to fiscal savings...the economic case for the method is based on false assumptions and misleading evidence" (Hellowell and Pollock, 2009, p.23; see also Boardman and Vinning, 2012; Smyth and Whitfield, 2017; Whitfield and Smyth, 2019).

Given this policy environment, avoiding PdPE processes avoids the possibility of PPP projects and policy being brought into further disrepute, resulting in one less front on which to defend an unpopular policy. This was highlighted by a senior public sector officer in our Snowfield case: "They don't want to do...[PdPE]...because it might become embarrassing". From our analysis, ignorance, natural and strategic, plays an ongoing role in maintaining and supporting PPP projects and policy.

From the above, we suggest practical implications. Concerning policy-making, throughout recent decades, the Green Book has directed UK policy-makers and economists towards a monetised cost-benefit analysis for public spending. We have seen such direction as helping support key parties to strategically ignore their broader responsibilities (Rayner, 2012) in providing public services. Further, reliable and transparent evaluation information is deemed crucial to public accountability (Shaoul *et al.*, 2012; Stafford and Stapleton, 2017).

Concerning overlaps between and ambiguity in important project management arrangements/plans (performance monitoring, benefits realisation and PdPE), at the policymaking level the government and relevant authorities should provide more explicit and complete guidance, reducing the possibility of policy users benefiting from ambiguities by avoiding responsibilities. Concerning implementation, efforts should be spent on overcoming the natural/genuine ignorance related to PdPE's role and importance, where, especially for the private sector, the project manager should be trained, or at least supported, to collaborate on PdPE. Further, an independent, publicly funded body should carry out the PdPE

for all PPP projects (this could be under the NAO's existing auspices). Thus, deployment of public funding is required to improve learning on PPP projects' operation and increased transparency and accountability for the vast amounts of public monies funneled through such projects.

To the best of our knowledge, this is the first study addressing the sociology of ignorance vis-à-vis accounting absence and PPPs, reinforcing how ignorance abounds, endures and is ubiquitous and utilised in socio-economic activities (Firestein, 2012). Considerable future work is suggested, including through further interviews with relevant parties, including with policy-makers to explore motivations behind our findings. The sociology of ignorance could be employed in further studies of accounting absence and ambiguity, including considering bo vensork counting p. how knowledge and ignorance are bound together and work in practice (Rappert, 2012), building on the intervention of Ravenscroft and Williams (2021). We anticipate deepening understanding of PdPE in PPPs, accounting practice and accounting phenomena, with insights from the sociology of ignorance.

Appendix A

Close Date Operation Value(Em) Length(Years) Snowfield PPP Schools (Non- 26/05/2000 01/09/2001 47.3 25 Snowfield PPP Schools (Non- 08/04/2004 01/04/2005 25.9 25 Snowfield PPP Schools (Non- 29/04/2005 01/02/2007 52.5 25 Snowfield Schools (BSF) 31/07/2007 01/04/2009 64.3 25 BSF Wave 1 Schools (BSF) 23/03/2011 08/07/2013 24.2 25 City centre office accommodation Offices 31/07/2012 01/09/2012 367 26 Snowfield Highway Roads and Highway 31/07/2012 01/09/2012 367 26		Sector	Financial	Date of	Capital	Contract
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Appendix **B**

Name	Position	Organization
Oliver	Director of City Centre Development	Snowfield City Council (SCC)
George	Chair of Snowfield School Forum; Head teacher at a local School	Snowfield School Forum
Amelia	Senior Procurement and Supply Chain Manager, Highways and Property; Finance and Commercial Services	SCC
Emily	Executive Director of Place	SCC
James	Director of Strategy and Commissioning	SCC
Robert	HSG	SCC
Michael	Project Finance Manager	SCC
William	Senior Facilities Manager of PFIs	SCC
Susan	Business Manager	M School Academy Trust (Snowfield School PFI3)
Mark	Assistant Contract Manager	M School Academy Trust (Snowfield School PFI3)
Kevin	Asset Manager	PK Limited (FM provider)
Anna	Contract Manager	FK Limited (SPV)
Eric	Contract Manager	TM PFI Ltd (FM provider)
Larry	Contract Manager	TM PFI Ltd (FM provider)
Jose	Project Manager	V facilities (FM provider)
Adam	Operations Manager	G Infrastructure Management (SPV)
Roy	Project Manager	G Infrastructure Management (SPV)
	participants (Anonymised)	
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