Uncomfortable Truths – Teamworking under Lean in the UK

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Abstract

This article responds to a recent contribution to this journal. Procter and Radnor (2014) provide an account of teamworking in the UK Civil Service, specifically Her Majesty's Revenue and Customs (HMRC), which focuses on the relationship between recently implemented lean work organisation and teams and teamworking. This intervention is prompted by criticism of the present authors' published research into lean in the same locus (e.g. Carter et al, 2011a; 2011b; 2013a;2013b). Procter and Radnor claim, without foundation we argue, that our work is 'one-sided' and that theirs delivers a 'more nuanced' analysis of lean in this government department - and it follows - of the lean phenomenon more generally. Our riposte critiques their article on several grounds. Firstly, it suffers from problems of logic and construction, conceptual confusion and definitional imprecision. Methodological difficulties and inconsistent evidence contribute additionally to analytical weakness. Included in our response are empirical findings on teamworking at HMRC, which challenge Procter and Radnor's evidential basis and further reveal the shortcomings of their interpretation.

Keywords

Lean, lean working, teams, teamworking, targets, new public management, HMRC

Introduction

At the outset of this riposte to Procter and Radnor's (2014) recent article on teams, teamworking and lean in the UK Civil Service, which criticises the present authors' work (e.g. Carter et al, 2011a;b; 2013a;b), it is important to provide some necessary contextualisation that locates our respective positions. The last decade has seen concerted efforts to transpose the principles of lean work organisation from manufacturing (Womack et al, 1990) to servicing and clerical work, particularly in the public sector. The justification for this diffusion has been the claim made by lean's advocates of its ability to deliver significant efficiency savings and improvements in service quality in the contexts of the economies of 'best value' and, since 2010, of the 'ConDem' UK coalition government austerity programme. In Seddon's words (2012), lean has seemed to be 'an answer from heaven', a silver bullet promising cost cutting, tightened task cycle times and reduced staffing levels without jeopardising - perhaps even enhancing - the customer experience.

The salience of the political-economic context surrounding and driving what Procter and Radnor term 'second-wave Lean in the UK' (Procter and Radnor, 2014: 2981) is understated in their account of developments in Her Majesty's Revenue and Customs (HMRC), the common locus of research that

forms the basis of contestation between us. In their version, lean is assumed to be a superior organisational methodology and practice in both rational-technicist and normative senses, assumptions that we challenge. They ascribe insufficient explanatory power to the imperatives of tight budgets and new public management that drove its adoption[i], so that lean is presented as an autonomous set of practices and principles divorced not only from political-economic contexts and employment relations but also from the dynamics of a conflictual employment relationship.

Womack and Jones' (2003) contention that lean had universal applicability, and was not confinable to manufacturing, proved influential. Lean's promise 'not just to do more for less, but better for less' (Radnor and Bucci, 2010) constituted its essential attractiveness, fuelling a growing acceptance by government and senior public sector management of lean's applicability. Popularisers of lean distilled its purchase to five core 'principles' (relating to value and value streams, continuous flow and cycle times) which further helped to spawn management how-to toolkits (e.g. George et al, 2004)[ii]. Increasingly, such practical guides focused on service work (Bicheno, 2008). Simplification of this kind was antithetical to the Toyota Production System (Seddon, 2005) and to the holistic nature of systems thinking, but it provided the means by which lean became widely implemented, at least in name, in clerical, service and even technical and professional work from the early-to-mid 2000s. Thus, the increased receptiveness of public sector management to hitherto neglected lean 'methodologies' meshed with urgent governmental requirements for financial retrenchment. At this juncture academics realised the opportunity for consultancy projects as public sector bodies either considered or had recently implemented forms of lean working. Prominent among these was one of the co-authors of the article to which we are responding. Under the auspices of the AtoZ Business Consultancy, Radnor pursued a series of consultancies, including the Scottish Government (2006), HMRC (Radnor and Bucci, 2007) and the Association of Business Schools (Radnor and Bucci, 2010) and, drawing on data from their reports, published widely in academic journals (e.g. Radnor and Boaden, 2008; Radnor and Walley, 2008; Radnor et al, 2012).

While academic studies based on findings from consulting projects are not in principle problematic, such work is susceptible to bias towards managerial preoccupations or problems of data selectivity and interpretation, difficulties which, we argue, are manifest in Procter and Radnor's article (2014). In the interests of balance and transparency, we explicate our own research methods and potential limitations, acknowledging the role of the Public Commercial and Services (PCS) trade union, which provided us with access and for whom we completed a research report (Carter et al, 2009). However, our critique of Procter and Radnor is based on more than epistemological and methodological difference. We contend that Procter and Radnor's (2014) argument is bedevilled by problems of logic and construction, conceptual confusion and definitional imprecision. Having neglected to consider in their literature review some of the more uncomfortable truths about lean and teamworking, analytical weakness is compounded by difficulties of method, data gathering and inconsistent evidence. In responding to Procter and Radnor's criticism of our research, we draw on our own empirical findings on teamworking and lean at HMRC, which both challenge their evidential basis and reveal the shortcomings of their broader interpretation.

Problems of Logic, Definition and Missing Literature

Procter and Radnor (2014: 2979) pose four questions on teamworking and lean production that they claim their article 'addresses'. The first appears, on the surface at least, to be a matter of clumsy expression, but a close reading of their paper suggests that it is much more than an unfortunate formulation. Indeed, because of the significant conceptual, methodological and empirical issues raised by the question it is worth quoting it in full: 'Given the stated importance of teamworking in lean production, what would we expect teams to look like as part of the contemporary application of Lean thinking?'. In the following sections headed 'Lean, lean teams and teamworking' (ibid: 2979-83), the authors' use of the conditional becomes clear. They posit the need to understand what 'that

[lean] team *might* look like' (ibid: 2979) by reference to teams in the writings of the innovators of the term 'lean' (Womack et al.,1990: 99) and of the founder of the Toyota Production System (Ohno, 1988)[iii]. It is valid methodologically, indeed desirable, to identify the original propositions on lean and teamworking and to subject them to empirical scrutiny in contemporary contexts. Evaluating the extent to which, and the reasons why, current managerial practice might depart from founding principles is important. What is problematic, though, is their construction of this (expected) version of teamworking under lean for the purpose of interrogating contemporary developments, while disregarding an established body of knowledge on lean and teamworking. Why posit such a conditional question, when hard evidence of lean's 'contemporary application' lies at hand, supported by over 20 years of research? A more meaningful hypothesis would have been constructed around existing knowledge rather than the speculative counterfactual[iv].

Procter and Radnor (2014) neglect a body of largely well-known critical work on lean (e.g. Danford, 1998; 1999; Delbridge, 1998; Landsbergis et al, 1999; Lewchuck and Robertson, 1997; Mehri, 2006; Sprigg and Jackson, 2006; Sprigg et al, 2007; Stewart et al, 2009)[v]. This omission may be less a breach of academic protocol and more a matter of avoiding uncomfortable evidence. Procter and Radnor imply that the 'labour process' perspective 'underpinning this [Carter et al's] conclusion' (ibid: 2982) has dictated the nature of our evidence, specifically unadulterated Taylorism'. Such an inference that questions our methodological rigour and research ethics is untenable. Our studies do not constitute some kind of mechanical, ideologically driven, labour process outlier that stands 'in contrast to' all other studies (ibid: 2982). Rather our evidence of lean and its effects on employees is consistent with a well-established body of critical work. While certain expectations were inevitably informed by a reading of the critical literature, our approach was essentially inductive, to let the findings speak for themselves and, through a process of iteration, drawing conclusions that developed the conceptual frameworks most appropriate for explaining the phenomenon in question.

The following synthesis of this work demonstrates engagement with this work and shows also how its absence renders Procter and Radnor's account, and not ours, one-sided. In the conventional wisdom of lean, the team is accorded the status of 'unique organisational form' (Womack el al, 1990). However, rather than becoming the locus of multi-skilling, job rotation, task enlargement and worker decision-making, the critical literature shows lean teams as exhibiting tighter supervisory surveillance and control, narrow tasking, detailed work and harsh targeting and highly circumscribed (if any) meaningful employee 'voice' and participation in decision-making. Instead of the 'creative stress', by which lean was meant to empower workers and to improve productivity, studies discovered heighted labour subordination, greater job strain and stress, physical and mental ill-health and systemic managerial bullying.

While many of these critical studies centred on manufacturing environments, some (e.g. Baldry et al, 1998: Sprigg and Jackson, 2006; Sprigg et al, 2007) produced similar findings from clerical or service work. Sprigg and Jackson's (2006) succinct verdict from their research into call centres was that 'the leaner the call centre, the meaner it will be'. Without imputing motive, it is difficult to escape the conclusion that the omission of this critical literature helps to explain the convoluted logic of the first hypothetical-conditional question. Missing two decades of critical research enables lean to be presented in a better light 'in principle' while ignoring uncomfortable truths revealed of lean in practice. The 'prior expectations', to which Procter and Radnor (2014: 2979) refer in their third question, should have been imbued with this critical evidence.

Procter and Radnor's treatment of teamworking is also deficient. Admittedly, they recognise that a central problem with teamworking might lie in reconciling the discretion exercised by workers in autonomous work groups (AWGs) with the tight continuous production flows associated with J-I-T (Just-in-Time) and lean. They cite Benders and van Hootegem's (1999) identification of the 'issue of

autonomy' but, beyond this acknowledgement, their discussion frequently confuses rather than clarifies and their usage of teamworking lacks definitional purpose. For instance, their treatment of teams in the health service (e.g. Finn et al, 2010) is largely descriptive, and while they echo its calls for greater clarity in definition (op cit, 2982) they do not provide it. Such imprecision is perhaps surprising given one of the co-author's involvement in an influential edited collection on teamworking (Procter and Mueller, 2000).

It is necessary to distinguish the traditions and variants of teamworking have been incorporated into managerial perspectives. Organic or naturally occurring groups or gangs (informal workgroups) were 'rediscovered' by the Human Relations movement during the 1920s and were promoted by the Tavistock Institute as AWGs. In turn, AWGs were appropriated by the Socio-Technical school in the 1950s, particularly in Scandinavia (e.g. Sandberg, 1993). In the 1980s, teamworking was rediscovered with new labels and was tied to the claim that organisations' economic performance was dependant on 'committed, flexible, multi-skilled, constantly retrained people, joined together in self-managing teams (Peters, 1987). In sum, the naturally occurring work group differs significantly from teamworking that is consciously utilised, or initiated, by management. The two main traditions of the latter are the socio-technical and the more recent Japanese forms. In the first, management attempts to harness the naturally-occurring collectivities, while in the second the team is constructed 'from above' and is associated with 'lean production', J-I-T and kaizen. Procter and Muller (2000) argue that these two traditions have come together, but the evidence from the literature suggests that the latter dominates and the socio-technical tradition is more claim than reality.

The conflation of these traditions and forms of teamworking present Proctor and Radnor with an underlying theoretical problem. Referencing Vidal (2007), they use the terms 'empowerment' and 'autonomy' (*op cit*: 2980; 2992) interchangeably, as if they were conceptually and substantively the same. Genuine autonomy is the outcome of inherent properties of group work, in which collectivities are able to exercise significant degrees of control over decision-making. In contrast, empowerment, a classic term in the unitarist HRM lexicon, gives to workers, operating within strict parameters at the very fringes of managerial power, a sense of decision-making at the level of immediate task performance (see Ramsay, 1996). The analytical precision that Marchington (2000) called for, and which is essential for cutting through the ambiguities and elasticity of the term 'teamworking', is missing from their account. Employing rigorous criteria, including degree of self-management, scope of activities, extent of polyvalent activity, member interdependence and so on (see Buchanan and McCalman, 1989 for an early example) would have proved beneficial.

Instead, Procter and Radnor propose a 'form of indirect autonomy' as a 'main defining characteristic of the lean team' (op cit: 2980), one that is 'effective through the responsibility that employees have for shaping SOPs (Standard Operating Procedures)'. This indirect autonomy does not come close to even a diluted form of the socio-technically inspired team, yet by a tortuous logic, these lean teams are held to constitute 'a different kind of autonomy'. The basis for this claimed 'indirect autonomy' lies in worker *responses* to centrally imposed SOPs rather than to any worker involvement in their formulation (ibid: 2988-90). Numerous studies have demonstrated the strict constraints imposed by SOPs on team members (Parker and Slaughter, 1988; Delbridge et al, 2000) and evidence from manufacturing shows the deleterious consequences for workers (Danford, 1999; Lewchuk and Roberston, 1997: Mehri; 2006; Stewart et al, 2009). It is difficult to escape the conclusion that the life raft of 'indirect autonomy' that Procter and Radnor use to rescue 'autonomy' is full of holes. The evidence section (op cit: 2988-2990), discussed below, contains little other than team and individual team member compliance to tightly prescribed protocols, consistent with the evidence of Carter et al (2009). No support for the notion of the 'indirect autonomy' in the secondary literature is adduced other than that by Procter and Currie (2004).

As if conceding that this muddled notion of 'indirect autonomy' fails to denote autonomy in any meaningful sense, Procter and Radnor return to studies of teamwork in HRMC's predecessor, the Inland Revenue (IR). Their second rescue attempt seeks to construct some notion of autonomy around 'target-based teamworking [which] can be seen as being reliant on outcome interdependence' (Procter and Currie, 2004: 1567). Notwithstanding individual case working[vi] and appraisals which run counter to teamworking principles, the authors claim employees identify with teamworking 'based on their team's goal or target output' (ibid; 1567). Now, the importance of team targets in the UK civil service have long been recognised (e.g. Baldry et al, 1998), but such research is neglected by Procter and Radnor. It depicts team targets as being the aggregate of workers' individual targets based on task individualism and work intensification, which do not engender even normative or cultural attributes of teamworking. The routine white collar work represented by Baldry et al (1998) developed under the pressure of efficiency imperatives and the 'Team Taylorism' of fragmented, detailed tasks subjected to tight control and surveillance strikingly resembles the realities of teamworking at HMRC.

We do agree with Procter and Radnor that teams at HMRC are not 'pseudo teams', in that they are not merely cosmetic, although Procter and Radnor (2014) do make a surprising confession given the overall tenor of their argument when they state that 'for some [in HMRC] the operations of the teams were not seen as an important issue…a team was little more than nominal' (2014: 2990). However, rather than trying to construct a case round 'indirect autonomy' or engaging in the fallacy that team-based targets generate a tangible sense of collective teamworking, it may have been more fruitful had they acknowledged or, better still, worked with the concept of 'teams without teamworking'. The work of van den Broek *et al* (2004) on teamworking in call centres is instructive. Utilising a model that comprises three dimensions of teamworking – technical, governance and normative – van den Broek et al found that team structures were constructed in terms of 'spans of control'. With self-governance almost entirely absent 'teamworking did not exist in any substantive or traditional sense' (2004: 211). Teams do have a managerial purpose as mechanisms of administrative control, dividing up large workforces, enabling effective supervision and monitoring and facilitating cultural and normative goals. In this account, team leaders or front line managers are perhaps more important than the teams themselves. Importantly, teams exist also as organisational entities designed to engender the internalisation of corporate values, an objective that has palpably failed at HMRC.

Methodology and Methods

Underlying methodological problems stem from the original consulting project. Radnor and Bucci (2007) were commissioned through their AtoZ Consultancy by HMRC to provide an evaluation of the Pacesetter programme as the centrepiece of the government agency's lean project. Throughout this and other reports (e.g. Radnor et al, 2006; Radnor and Bucci, 2010), the authors insist that they provide an 'independent assessment' of management's lean initiatives. Yet the degree of independence is open to question.

The 'Interview outline/schedule for Focus Groups' used in the HMRC study (Radnor and Bucci, 2007: 85) contains a preamble laden with normative assumptions, making reference to 'efficiency improvement methodologies', and prescriptive intent, that their work can enable HMRC 'to continue to make informed decisions and responses about the development and use of Lean and Operational Management/Senior Leadership'. More blatantly, they state that they are 'especially interested in understanding how the [lean] methodology used has *improved* (our emphasis) your working environment and processes as well as the sustainability of these interventions'. Framed in this manner, only positive contributions are solicited at the expense of balanced questions that might prompt the reporting of negative experiences[vii]. Of greater concern, though, regarding the potentially compromised independence of the study is the admission that their final evaluation

report 'was validated by senior HMRC personnel' (Procter and Radnor, 2014: 2987). Perhaps in anticipation of such criticism, they draw the distinction between the report and the paper but, since the data set is identical, this defence is a sophistry.

Concerns arise also over method and technique. First, there is the issue of the number of participants and the nature of their participation. The authors state that 296 personnel were involved in 'semi-structured interviews or focus groups', an impressive number, but examination of the data sources and sites (ibid: 2985-6) indicates that interviews were conducted only with senior management (SOs or HOs) or 'lean experts' - with the exception of one trade union representative. As many as 230 research subjects were either at AA (Administrative Assistants), AO Administrative Officer or O (Officer) grades. When they declare that these grades were 'interviewed in focus groups' (ibid: 2987), they are guilty of conflating quite different qualitative research methods. Second, no information is provided of the conditions in which the focus groups took place or how the participants were selected or volunteered. Third, at two sites front-line managers (Os) were 'mixed' with non-supervisory grades (AOs and AAs), with unacknowledged consequences for the latter's freedom of expression and confidentiality. Fourth, no information is provided of their approach to the analysis of the focus group data, a challenging undertaking given the different grades of employee involved, the number of focus groups (27) and the large number of participants (average 9 per group) for such a relatively short duration (45-60 minutes). Finally, difficulties emerge in the presentation of the evidence. On numerous occasions it is unclear to whom and to what grade the quotes are attributable; for example, 'one officer said' (ibid: 2990), 'one interviewee expressed' (2991) and 'a third employee' said (ibid: 2991). The grade of the interviewee is not an immaterial consideration when interpreting the salience of their testimony.

In the interests of equity and in order to frame our rebuttal, we explicate our research approach and summarise our methods. Although supported and given access by the Public and Commercial Services (PCS) union, this study was not initiated nor commissioned by them. A report was prepared for PCS, but we remained throughout the research and dissemination process unequivocally independent, to the point where published work has been quite critical of PCS's leadership (Carter et al, 2012). Within mainstream studies management perspectives are over-represented (Alvesson and Skoldberg, 2000) so, given the central objective of our research to examine perceptions and experiences of lean, employee survey responses and interview narratives were entirely appropriate. Consequently, our purpose was not to chase elusive and unattainable universal truths of lean but, committed to giving expression to the experiences and voices of the marginalised agents within the dominant discourse; we sought to 'offset the unequal resources available to them compared to managers' (Brook and Darlington, 2013: 2136). This orientation does not render our research approach problematic nor mean that our evidential basis is narrow.

The combination of qualitative (unstructured and semi-structured interviews) and quantitative methods (11-page questionnaire) delivered a data set of depth and breadth (840 completed surveys and 36 in-depth interviews) that permitted the thorough investigation of lean through the prism of front line agents. Other data sources (documentation, management interviews, HMRC sources) provide some triangulation. The detail of the method is best found in Carter et al, (2013b:752-5) and shows reflexivity on the strengths and limitations of worker-centred knowledge, retrospective recall, sample representativeness and the danger of bias[viii]. Procter and Radnor's principal line of criticism is that our interpretation is 'almost exclusively negative' and one-sided in contrast to their 'more nuanced alternative' (2014: 2992). As we demonstrate shortly, the conflict is not between our purported negativity and their claimed nuance, but difference based on the respective weight, status and transparency of evidence. Lest our alleged negativity might be seen as the outcome of a biased survey instrument, we emphasise how our questions were carefully constructed, including those using the Likert scale, to allow for a full range of possible answers.

The Weight of Evidence

This section bridges methodological/epistemological considerations, on the one hand, and empirical concerns and the presentation of evidence on the other hand. A major issue for Procter and Radnor, to repeat, is our alleged negativity. It is true that our evidence of negative responses to lean does frequently involve significant, even overwhelming majorities. To provide some examples; 77 per cent reported that HMRC 'does not listen to your suggestions on lean'; following lean only 5 per cent reported that they 'set [their] own pace of work' either 'quite a lot' or 'a great deal', compared to 78 per cent before lean; only 16 per cent before lean felt 'quite' or 'very pressurised' as a result of work on a normal day compared to 95 per cent after lean; the factors that contributed either 'a great deal' or 'to some extent' to the pressure were meeting individual targets (92 per cent), meeting team targets (90 per cent), keeping to SOPs (81 per cent), continuous workflow (70 per cent); almost four in five (89 per cent) reported that work intensity had increased either 'a lot' or a 'little' after lean; 62 per cent believed that 'the skill content of work' had decreased 'a little' or 'a lot' after lean (Carter et al, 2009). These emphatic findings are not a contrived negativity but are comprehensive evidence of workers' genuine antipathy towards lean during the process of its implementation and through experiences of lean working in the reconfigured organisation.

In contrast, the reported evidence by Procter and Radnor is ambiguous, contradictory and often misleading. To give some examples: they state that '*a number* of front-line staff….pointed to the negative consequences of' undertaking detailed, post-lean, detailed task, data inputting (2914: 2988); they claim that '*some* welcomed lean on the basis that it gave then a greater structure' (2014: 2992)'; and that 'Focus groups referred to improved "team spirit"' (ibid: 2992). No indication is given of the relative weight of responses when mixed experiences or perceptions are reported. If a *number* of front-line staff were critical of the practice of fragmented data inputting and others were not, the real questions are how many were in each camp and how representative are the statements reported? If *some* welcomed the structural certainty lean provided, again, the question is how many? If, as indicated, focus groups reported improved team spirit, the questions prompted are how many focus groups, involving what grades and how many within these groups believed this improvement was the case? It is not enough to assert that 'the balance was very much on the positive side' regarding staff involvement in problem-solving (ibid: 2989) without demonstrating how the evidence stacks up.

This argument against their methods stands even where they attempt to be more specific. Their most substantive claim is that there were notable variations in the implementation and practice of Lean between local processing offices and district processing offices, on the one hand, and National Offices, on the other:

> The national processing centres . . . were able to use their respective unique positions as a means of retaining some control over how they did their work, which in turn encouraged a greater degree of involvement on the part of front-line staff (2990).

This assessment appears to be based on the relative power of senior managers in the national centres, enabled through their control of unique areas of work, making it easier for them to shape and develop the SOPs, rather than having to conform to an externally imposed nationwide blueprint' (2990). In effect Procter and Radnor's evidence conflates the views of managers and those of workers. Our data from one of the same national offices studied demonstrate neither significant difference from local offices in levels of employee involvement, nor in measures of 'indirect autonomy'. What difference there was between offices was negligible in comparison with the pronounced decline in measures of job quality. At the national office, 'frequent' or sometimes' help from team members reduced by 26% after the introduction of lean. Moreover, while help declined the pressure exerted on each other rose from 13% to 52 after lean suggesting the transformation between members to harsher relations. Job rotation similarly declined by 33%. The reduction in the

use of expertise was even starker at 49%. Qualitative data similarly revealed no great difference in experiences. One employee at the national office described the parameters of involvement: 'Any criticism, it had to be … this came from the LEAN council's mouth … criticism had to be positive. Negative criticism had to be … had to have a positive spin on it' (PCS branch committee member).

Teamworking at HMRC - A Tale of Two Case Studies or Two Tales of One Case Study

Radnor and Bucci's asserted that 'teamworking [at HMRC] was generally acknowledged to be better under lean and there was a better team spirit' (2007: 7). That the evidential basis for this claim was questionable can be seen from a close reading of the report but also from our survey's findings. The responses to a four-item question (Carter et al, 2009) (Table 1) provide compelling evidence that following the introduction of lean employees believed that teams had less relevance regarding the locus of interdependence, task enlargement, multi-skilled and problem solving.

First, there is a decline in the extent of reported collaboration and interdependence, as indicated by the 60 per cent of respondents who said they frequently received help from team members before lean, compared to the 26 per cent after lean's introduction. Second, there is the constrained extent of job rotation. According to 70 per cent of respondents, task rotation which is one of the shibboleths of lean 'frequently' or 'sometimes' occurred before the introduction of lean, compared to 30 per cent who believed this was the case after lean. Third, and perhaps the most striking contrast is that between the 65 per cent of respondents who believed that, before lean, they 'frequently' used their expertise and capability and only 11 per cent thought that this was true in post-lean conditions. A mere 4 per cent considered that they 'hardly ever' or 'never' used their expertise and capability before lean, compared to 54 per cent who stated that this was the case after lean. Fourth, the evidence indicates the growth of peer group pressure; only 14 percent of respondents felt that they had been put under pressure by other team members to work harder before lean, a proportion that had grown to 54 per cent after lean.

Table 1: Perceptions of Teamworking Before and After Lean (n=840)

How frequently did/do you experience the following aspects of teamworking BEFORE and AFTER the introduction of lean?	Frequently %		Sometimes %		Hardly Ever %		Never %	
	Before	After	Before	After	Before	After	Before	After
Help received from team members	60	26	34	46	5	25	1	8
Task rotation in your team	33	11	38	19	17	35	10	34
Use of my expertise and capability	65	11	31	34	3	36	1	18
Pressure to work harder from other team members	2	18	12	36	38	21	47	21

Now, it is not to present team working before lean as some white-collar idyllic craft, but it is to emphasise how the introduction of lean into HMRC resulted in a thoroughgoing restructuring of work organisation that transformed the job. Prior to lean the tax officer undertook whole case working (Fisher, 2004) that saw the completion of a series of relatively standardised tasks certainly, but involved job rotation, task discretion and a degree of 'responsible autonomy' (Friedman, 1977). Lean saw segmentation, standardisation and simplification of work processes through utilising classic Taylorist time and motion and the spatial reordering of work stations to minimise unnecessary worker motions and activity (Carter et al, 2011b). Its intention was to create a distinct breach or rupture with past traditions of work in an informal sense and in the more formal sense of 'the way that things are done'.

Carter et al's position is consistent. Not only does the weight of statistical evidence, based on a carefully formulated and rigorously analysed questionnaire, emphatically expose the work fragmentation, deskilling, excessive monitoring and work intensification that lean brought, so too

does abundant employee testimony deliver compelling first-hand insight. Space constraints prohibit more than the one rather lengthy quote:

> The use of hourly monitoring and whiteboards serve no purpose to management other than to apply pressure on staff to work harder. The unrealistic targets that management set are not based on valid timing exercises. They have produced higher targets without explanation. If any lean procedures are challenged or questioned by staff, then staff are accused of being negative. Daily meetings are basically a waste of time and do not add any value to staff or customers. (Lothians, Administrative Officer)

Reading Procter and Radnor's article dispassionately, the striking conclusion is how little support they actually muster for their claimed balanced view of lean and how little evidence is marshalled to undermine Carter et al's. On the contrary, many of their quotes are quite consistent with our study. Notwithstanding their problem of scale and identification (how many and who) they observe (2014: 2987) that 'there was evidence of employees feeling that work had become fragmented and degraded with employees responsible now for 'only a particular part of a [tax] return'. Another employee complained, 'Like everyone else I feel I've been deskilled' (ibid: 2988). Relentless work pressure resulted from the cascading downwards of SOPs that remained impervious to workforce influence. With regard to suggested changes to unacceptable targets, 'Even some of those at Officer and Higher Officer Level…expressed frustration at the fact that their proposals were not always put into effect'. On the matter of the centrally driven SOPs, Procter and Radnor (ibid: 2989) state that there was 'no real input' into how processes were implemented, yet this a key notion summonsed by them in favour of 'indirect autonomy'.

Nevertheless, Procter and Radnor attempt to ameliorate the negative representation of lean, but the continuous criticism of it throughout their article makes their defence Maginot-like in its effectiveness. Ultimately, they fall back on the justification that the reorganization of work associated with lean brought greater certainty; 'staff now had a better idea of who their immediate colleagues were and, as a result, would discuss work with them much more than before…[a feeling] encouraged by the holding of daily team meetings and by the physical presence of team performance boards' (2104: 2990).

This claim that inter-colleague communication was enhanced by lean is challenged by the evidence on time spent, post-lean, at the work station (Carter, 2013b: 759) whilst engaged in tasks. Remarkably, 48 per cent of respondents spent 95 per cent or more of their work time constantly engaged in tasks and a further 38 per cent spent between 85 per cent and 95 per cent. In these conditions of extremely reduced porosity of the working day, over and again respondents provided testimony of how they were no longer able to speak to work colleagues in formal (often problem-solving ways) as they had been previously. Indeed, 35 per cent of those surveyed believed that now 'no time to talk to colleagues' contributed 'a great deal' to the daily pressure of the job (ibid: 761). The replacement of this ongoing lateral engagement between colleague - that might be regarded as typical AWG behaviour - by formal, scheduled, team leader-led, team meetings that were dominated by targets and their achievement and underperformance, had the ironical effect of belittling genuine teamworking. Such developments call to mind a vivid early illustration of the displacement of AWGs by lean – or 'Japanised' – teams. Taylor and Ramsay (1998) reported how at the ASDA supermarket women on the deli counter had been 'autonomously responsible' for all manner of work activities, from organising shifts to interchanging roles. Then the company introduced team briefs, daily target discussions, and structured procedures which curtailed interaction, leading one experienced worker to comment, 'When they brought in teamworking they stopped us team working'. Thus, it was the case at HMRC.

The additional claim that Procter and Radnor make, that the 'physical presence of team performance boards' deepened the feeling and awareness of teamworking and enhanced communication, is

unsustainable. If a single aspect of the new regime of lean teamworking could be isolated as the symbol of all that was disliked, it would be the whiteboards and the hourly targets. As many as 54 per cent of survey respondents (Carter et al, 2013b: 761) reported that the whiteboards contributed to a great extent towards pressure of work on a daily basis. More testimony was volunteered on this specific issue than any other and, it should noted, the removal of whiteboards became a central and popular union demand. Procter and Radnor even undermine the positive portrayal of teamworking when they quote a front line worker saying that 'daily meetings are a waste of time and resource' (2014: 2991).

In sum, Procter and Radnor's evidence is strikingly contradictory. They hark back to Procter and Currie's (2004: 1567) narrow claim for teamworking that 'it is employees' identification with their team's goal or target output, rather than their identification with their fellow team members, that provides their identification with the team' (1567). Dubious in terms of conception and in relation to a body of critical literature, this assertion has even less substance when they set their ambiguous findings against the robust evidence of Carter et al's.

Government Sources

Part of Procter and Radnor's (2014: 2983) case against us is to question the claims that our work is supported by evidence from official government sources. In fact, Procter and Radnor misrepresent our use of this evidence by incorrectly stating that the Civil Service People Survey (CSPS) is cited in Carter et al. (2013a). They confuse it with the Treasury Select Committee (2010), a cross-government staff survey that ranked HMRC as having the 'most unhappy' workforce in the 53 departments surveyed. The Committee criticised HMRC for low morale and its culture of 'command and control', in which many overstretched staff were facing burnout as management drove them 'to go the extra mile'.

Yet, the CSPS, which Procter and Radnor claim does not lend support to our work, reported that the HMRC had the 'least engaged' of any Civil Service workforce (2014: 2983) with its 'employee engagement index' the lowest of any department (at 34% compared to a high of 72% and median of 56%). They assert that 'the situation is not so uniformly bleak as Carter et al suggest' (2014: 2983), because we neglect scores for 'resources and workload', a category which includes items on 'skills and workload' and '*My team*'. Now, we acknowledge that the survey indicates that some areas of work, although still below the Civil Service benchmark did show higher positive responses and, moreover, the high scores for questions for *My Team* might appear to indicate some support for teamworking. However, deconstructing the specific questions comprising the *My Team* composite reveals potential errors in Procter and Radnor's conclusions. Where scores are high as, for example, in the response to 'the people in my team can be relied upon to help when things get difficult in my job' (82 per cent) and 'the people in my team work together to find ways to improve the service we provide' (76 per cent), they reflect informal group and collegiate solidarity rather than technical questions of lean and teamworking. Further, responses resonate with employee commitment to the public sector ethos which is associated with opposition to lean working.

The likelihood of group identification, as opposed to lean teamwork being the major influence on *My Team* scores is supported by results from two additional themes: work and line management. CSPS revealed that, while 72 per cent of respondents 'agreed' or 'strongly agreed' that they were interested in their work, the average of positive responses to *My Work* was 49 per cent, 22 percentage points below the civil service benchmark. This figure was driven down by very low scores in HMRC on 'the amount of control' staff felt they had over their work. HMRC scored well below the civil service threshold. Further, only 28 per cent believed they were involved in decisions affecting their work, an 'in-house' finding that in and of itself is quite damning of lean.

Despite censure of the 'command and control' culture within the leaned HMRC (Treasury Select Committee, 2011), front line management are not the object of unmitigated hostility. Employees see them as willing to listen to employee ideas (70 per cent) and only 21 per cent were dissatisfied with the amount of respect they received from line managers. The latter percentage compares with the 60 per cent dissatisfied with senior managers (Carter *et al*, 2014). How do we make sense of this interesting distinction? The explanation may well lie in the depth and breadth of antagonism to work organisation in the lean environment, for which senior management are seen as responsible. In contrast, many front-line managers who, it must be remembered, are largely drawn from and have empathy with the ranks of the employees, were themselves deeply unhappy with the rationality of the lean changes and the roles that they had been forced to adopt (Carter *et al*, 2014).

In sum, Procter and Radnor are unsuccessful in their attempt to eke out some positive message from these government reports and, simultaneously, fail to undermine our critical case against teamworking in HMRC's lean.

Conclusion

HMRC constitutes perhaps the most important case study of lean working in the UK public sector, because it may be 'the closest of any public service organisation to date in implementing the complete lean philosophy' (Radnor and Boaden, 2008: 2). What is remarkable about Procter and Radnor's (2014) article is how unsuccessful it is in making a case for lean teamworking consistent with the original propositions of Womack et al (1990: 5). It should be remembered the latter had insisted that, 'In the end, it is the dynamic team that emerges at the heart of the lean factory' and that 'workers need to be taught a wide variety of skills so that tasks can be rotated' and 'must have the ability to think proactively to devise solutions before problems become serious'.

These virtuous characteristics of teamwork are notable by their absence in HMRC's back office where downward cascades of tightly prescribed targets dictate claustrophobic monitoring and the hourly measurement of outputs and performance. Management measures performance, as elsewhere (Taylor, 2013), and disciplines those who fail to meet them. Procter and Radnor's claims of 'target-based teamwork' and 'indirect autonomy' are not just conceptually flawed but empirically unsustainable, given that no real evidence is proffered of employees' ability to shape SOPs or to amend targets at HMRC. This conclusion should not come as a revelation to those familiar with the critical literature on lean and teamworking, from Lewchuk and Robertson (1997) to Stewart et al (2009), but which appears to have escaped the attentions of Procter and Radnor. It is impossible to conceive how 'responsible autonomy' (Friedman, 1997) or the chimera of 'indirect autonomy' could be realised in such a 'labour constrained' market environment at HMRC in which, as Procter and Radnor concede 'workers should produce as much as they can' (2014: 2993).

We agree with Procter and Radnor when they describe our research as a 'largely negative portrayal of Lean'(2014: 2979), as 'unequivocally' negative (op cit: 2982) and as an 'almost exclusively negative interpretation' (op cit, 2992). The reasons for this negativity do not lie in bias or weakness of method or interpretation, but are much more straightforward. The findings reflect the widespread and deep-seated opposition of employees to teamworking under lean at HMRC. Certainly, we would have preferred not to have uncovered such an increasing immiseration of working lives, including the terrible associated problems of occupational ill-health (Carter, et al, 2013b), but the data compelled such a transparent and consistent interpretation. The specific weight of evidence in Carter et al's work does not signify one-sidedness or bias, nor does the mixture of positive and negative responses in Procter and Radnor's article indicate nuance.

One of the curious aspects of Procter and Radnor's (2014) article is that its cautiously favourable evaluation of lean, in general, is not matched by much in the way of supporting evidence. Many of the illustrative quotes are quite critical. Winding the film backwards, Radnor and Bucci's (2007)

initial report on HMRC, based on the same dataset is, by way of contrast, much more positive about the outcome of Pacesetter, insisting that HMRC was 'moving in the right direction' to become a lean organisation. Teamworking was claimed to be better under lean and team spirit much improved. Reference is made here and elsewhere to the 'lean journey', a teleological positivity that acknowledged difficulties only on the grounds of 'incorrect implementation' or 'work in progress'. Seddon (2012) criticised Radnor and Bucci (2007) for failing to admit to 'deleterious effects' for employees.

So a shift has taken place from the overt managerialism of the 2007 consulting report to the guarded criticism of the academic article of 2014. It appears as if Procter and Radnor now want to run with the hares and hunt with the hounds, to hedge their bets on whether lean can still become that 'sustainable' 'methodology' to use two of their over-used words, or whether its damaging impact on both the experience and outcomes of labour and the accumulated weight of criticism will damage its usefulness for management. Managerial fads and fashions tend to have limited currency so that, in order to remain credible one-time promulgators and evangelists may evolve into critics. More recently, Radnor and Osborne (2013: 265) have argued that 'the implementation of lean to date has been defective'. Bizarrely, some of Radnor's earlier co-authored work has been quoted critically in Procter and Radnor's article (2014: 2981); thus, 'positive outcomes have been reported (e.g. Radnor and Boaden, 2008) but they do need to be looked at with great caution'. Now this is not so much a rigorous auto-critique, as a chameleon-like shifting of position to blend in with a more critical zeitgeist.

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[i] A striking example of this political-economic deficit is the failure to refer to the new Labour government's implementation of 10,500 job cuts at HMRC from 2004, to the appointment of Sir David Varney who embarked on a wholesale change programmes in 'mimicry' of private sector values and disciplines. Nor is the decisive Gershon (2004) report mentioned.

[ii] Radnor's consultant reports repeat Womack and Jones' distilled five core principles in a kind of 'plug and play' section on lean's background (e.g. Radnor et al, 2006; 8-9; Radnor and Bucci, 2007: 67; Radnor and Bucci, 2010:13).

[iii] Procter and Radnor do not elaborate on the ways in which teams and teamworking are used by the Toyota Production System

[iv] A more satisfactory question might be formulated along these lines, 'To what extent and in what ways do the teamworking practices and employee experiences of lean identified at HMRC, differ from or are consistent with knowledge of teams and teamworking in lean environments based on two decades of research? '.

[v] Taking care not to misrepresent Procter and Radnor (2014), we do acknowledge that they refer to some limited work on lean (Conti and Warner, 1993; Benders and van Hootegem, 2000; Delbridge et al, 2000; Vidal, 2007), but their review is truncated and largely unsatisfactory and incomplete.

[vi] We argue that individual case working is actually more compatible with 'autonomous' teamworking than the fragmented, detailed work of the lean teams.

[vii] Radnor and Bucci's encouragement of positive views should be seen within the context of contemporary industrial relations. When Radnor and Bucci's conducted their research (January to June 2007) employee and union (PCS) opposition to lean was so intense that it had already manifested itself in strike action in the Lothians (April 2006), backed by an overwhelming majority (80 per cent) of members, and was to produce national strike action.

[viii] Such reflexive concerns are absent from Procter and Radnor.