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Keywords: innovating-in-
practice, practice theory,
work organization dualities,
employee-driven innovation
(EDI), new public manage-
ment.

Abstract

Public sector organizations continue to re-organize in response to reform imperatives but are they more innovative when they transform to market or customer orientations? This paper examines what we call innovating-in-practice in a hospital emergency department, a local government council and a corrections centre by analyzing how work organization dualities are negotiated using a practice theory lens. In public sector work, work dualities and tensions are often created when reform initiatives are introduced, requiring existing work practices to be challenged and changed. Our empirical illustrations expose the messiness and enmeshing of various practitioner interests, relations, materialities and purposes of practice in ways that restrict or embrace innovation. Innovating-in-practice 'troubles' the structural limitations of conventional approaches to organizing or designing for innovation, suggesting in contrast, the value of more fluid processes for reinventing work that emerge from accommodating work organization dualities and interrogating the complexities of practice-based accomplishments.

Organizing in an era of (post) new public management: 'Troubling' reforms and dualities

The rhetoric of new public management (NPM) continues unabated with some researchers suggesting ways to 'construct' the new public organization (Brunsson & Olsen, 1993; Brunsson & Sahlin-Andersson, 2000; Lynn Jr., 2006) while others assert that NPM is now passé so we need to move onto examining the features of the post-NPM public entity (De Vries & Nemeč, 2013). The pro-NPM managerialist view argues for the adoption of private sector practices (e.g. customer focus, organizational redesigns) to rectify poor public sector performance (Dixon, Kouzin & Korac-Kakabadse, 1998). In contrast, NPM critics bemoan the over-emphasis on 'the '3Es' of economy, efficiency and effectiveness' (Chaston, 2011: 23) in what now counts as good public sector work. Such

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rhetoric acknowledges that organizations are often instruments or the means for change through alterations to their structures and/or processes (Brunsson & Olsen, 1993: 2) but these perspectives appear to idealize the polar extremes as if romanticizing and grieving for a simpler uncontested past. The larger question remains, however, whether public sector reform has led to more innovative work practices, improving the agility of enterprises to protect the public good while also embracing market mechanisms and ongoing change.

Our paper suggests a way to conceptualize innovative public sector work by examining what Sánchez-Runde, Massini and Quintanilla (2003: 261-264) call *work organization dualities* through the analytic lens of practice theory concepts. Sánchez-Runde et al.'s (2003) examples of dualities are the tensions between:

- assignment clarity versus task flexibility,
- defined accountability versus freedom to execute,
- specialised professionalism versus multidisciplinaryity, and
- inter-team adaptability versus intra-team stability.

Such tensions arise because 'new structuring patterns demand new forms of work organizing' (Sánchez-Runde et al., 2003: 262). Essentially, organizations strive to find that balance between continuity and change: planning and designing where possible while adapting to ongoing disruptions. We believe that it is not that practitioners must choose between one or the other choice in a duality, but that in the negotiated process of performing work for the local circumstances (particularly when there are conflicting or oppositional goals), work practices are constantly re-constructed and that leads, in some cases, to innovative practices.

At the enterprise or work practice level, a common managerialist approach is to apply structural design principles to re-organize (e.g. create new business units or networks) or to redistribute work (e.g. de-job or enlarge jobs, create temporary projects or roles). We claim that these organizational design solutions, at best, are static and formulaic representations of desired future states and provide insufficient guidance to enact sustainable change. We 'trouble' this static approach by appealing to contemporary practice theory concepts that we have found analytically useful in our research. In this way, we respond to Blackman, Kennedy, Burford and Ferguson's (2013) recent call in the *International Journal of Public Administration* for more empirical public sector case studies that investigate how practice-based innovation occurs.

Our research suggests that performing in the new public organization needs the messiness and embodiments of practice: its enactments, teleo-affective structurings, practitioner judgements and materialities to give work its purpose, meaning and contextual relevance. Importantly, how practitioners know, learn and adapt together and what they pay attention to or consider – particularly in public sector work, how they practically accommodate seemingly incompatible goals: the provision of the public good *and* new performance imperatives – influence the conditions within which innovative work practices emerge.

Our next section introduces the theoretical basis of our research, starting first with a brief commentary about the conventional positioning of innovation research but focusing mostly on identifying selective practice theory concepts that we believe have much to offer in bridging the innovation literature. We then examine research findings from three Australian sites of re-organized public sector work that illustrate examples (at one site, rejection of) innovative work practices interrogated from a practice theory analytic lens. We conclude with raising some implications for using the concept of ‘innovating-in-practice’ and facilitating the conditions that embrace the complexity of dualities to generate innovative work.

Shifting to a practice-based view of innovation

The research literature on innovation appears to us to depend on the levers that researchers perceive as instrumental to innovation success. For example:

- who participates in innovation and at what levels,
- what types of innovation are under examination, and
- what contexts (often, industries) structure the innovation requirements or phenomena?

Participants can be organizational entities – ranging from traditional research and development departments (e.g. Dougherty, 1999; Rothwell, 1992) or importantly more recently, the employee segment (e.g. Høyrup, Bonnafous-Boucher, Hasse, Lotz & Møller, 2012) – to various sectors of society that can generate a ‘triple helix’ effect of working relations among academia, industry and government (e.g. Leyesdorff & Etzkowitz, 1996) or a national system of innovation (Lundvall, 2010). The research emphasis on product innovation success in primary industries (e.g. Danneels, 2002; John & Snelson, 1988) has shifted towards service innovation success in secondary industries (e.g. Fagerberg et al., 2004; Miles 2008; Sundbo & Gallouj, 2000; Toivonen & Tuominen, 2009) in a growing and globalising knowledge economy. In particular, the nature of public sector service innovations (Bason, 2010; Borins, 2001; Veenswijk, 2005; Windum & Koch, 2008) remains of contemporary interest given the sector’s critical role in influencing public policy, the complexity of its stakeholder relations and the legislative, economic and community reform implications for nations and organizations.

Our particular lens on public sector innovation starts with the units of work that are actually performed, with the practices that integrate the knowing, learning and acting of practitioners embedded in public sector organized work. We do this because abstract concepts like culture (Veenswijk, 2005) or creativity (Windum & Koch, 2008) as sources of innovation are difficult to examine directly. We prefer to analyze and closely scrutinize the messiness of everyday work practices and *how they change*; for that purpose, we draw from the growing sources of practice theory literature to help us theorize what we have termed ‘innovating-in-practice’.

We particularly focus on selective practice theory contributions from a philosopher of social science (Schatzki), a sociologist of science (Pickering) and a sociologist investigating work (Gherardi). We believe their articulation of practice theory concepts, *taken together*, shed light on the complexities of negotiating multiple stakeholder interests and the notions of work organization dualities that represent contemporary public sector work.

Practice-order bundles, materiality and teleo-affective structurings

From a business studies perspective, an organization is commonly considered to be a structural entity with strategic goals, desired outcomes and resources organized to achieve such goals and outcomes (Daft, 2009). As Ferguson, Burford and Kennedy (2013: 169) recently observed, this may be appropriate in predictable environments where reproduction of standard products and services is valued but less appropriate in contemporary environments of continuous change that increasingly depend upon knowledge work and innovation. As a social philosopher, Schatzki is interested in the basic structures of social life and similarly prefers to view organizations more dynamically. He theorizes a site ontology (Schatzki, 2002) where practices interconnect the individual and the social in a mutually constitutive relationship. Further, his notion of an organization foregrounds it as the site of the social (Schatzki, 2002, 2005), but one that is always becoming; that is, change and stability are inherent in the (re)production of practices (Schatzki, 2011; Price, Boud & Scheeres, 2012).

A Schatzkian view of organization is 'like any social phenomenon, [it comprises] a bundle of practices and material arrangements' (Schatzki, 2006: 1863). Many different practices are carried out by practitioners' actions in and across staged activities of work as teleo-affective structurings, or according to the purpose and intentions for actions and activities. Such practices are enacted 'in conjunction with a complex of linguistic and nonlinguistic actions, thoughts, and readiesses that are distributed among practice participants, often according to roles and statuses' (Schatzki, 2006: 1869). These roles may be distributed according to knowledge or experience hierarchies that often derive from past traditions. Further, this view of practice embraces material arrangements as important organizational participants in line with the tenets of actor network theory (e.g. Law & Hassard, 1999; Law 2009) and recent work on sociomateriality (e.g. Fenwick, 2010, 2012a). Both material arrangements and bundles of practices operate in particular timespaces (Schatzki, 2009) that are configured by webs of relations interconnecting practitioners in temporal and spatial ways. Such a perspective of organizing (rather than organizations) suggests a processual emphasis on fluidity and adapting 'in real time' the collective performance of organized work (Tsoukas & Chia, 2002).

Although Schatzki does not explicitly discuss innovation or innovating, his fluid concepts of practices as open-ended suggest that in any enactment of practice, there is the potential for practitioners to do something different, to not only repeat or reproduce past practices but to refine and to potentially innovate for the prevailing current circumstances.

The mangle of practice: interdependency, emergence and indeterminacy

Pickering focuses on a posthumanist conception of practice in foregrounding the temporally emergent nature of practice and practicing (Pickering, 1993: 561). For Pickering, humans and materiality are reciprocally engaged through a dialectic of resistance and accommodation – what he calls the ‘mangle’ where his theoretical focus is on ‘science as a field of emergent human agency’ (Pickering, 1993: 569).

Pickering uses the mangle metaphor to emphasize the complex dialectic and reciprocity that plays out between practitioners and the materialities of everyday work. Although work processes may be, on paper, illustrated by clear linear diagrams of steps and stages, in reality, tracing actual interactions, queries, feedback and progress represents a mangle of negotiated behaviours, interests and interdependencies. Importantly from Pickering’s research into the sciences, the privileging of knowledge is a key aspect of the indeterminate, nonlinear and tension-filled effects that characterize how certain workplaces organize work (see Manidis’ discussion on medical knowing later in this paper).

Pickering (1993: 585) observes that

resistance (and accommodation) are at the heart of the struggle between human and material realms in which each is interactively restructured with respect to each other ... material agency, scientific knowledge, and human agency and its social contours are all reconfigured at once ...[serving] to define the emergent posthumanist de-centring implicit in the mangle.

Similar to Schatzki, Pickering does not explicitly address innovation in his conceptualizations. However, Pickering’s notions of practices are clearly not linear or neat; rather, they are experimental and responsive in their very nature, relying on the vagaries of human and material accommodations and resistances that emerge over time. His theorizations alert us to the emergent quality of practices as they change and develop, providing opportunities to investigate them as sources of changing practices and sites of innovation.

The texture of practice and knowing-in-practice

As a sociologist investigating work, Gherardi researches how practices in organizations are accomplished, or how work actually ‘works’. Similar to Pickering’s mangle, Gherardi’s (2006) texture metaphor characterizes work practices as an enmeshing of artefacts, people, language, space and things into interwoven, bundled, interconnected and emergent events, social relations, space/time and material arrangements.

Gherardi is particularly interested in organizational knowledge, or what she calls the phenomenon of ‘knowing-in-practice’ (Gherardi, 2009: 117) because for her, knowing in practice is a practical accomplishment. Knowing as a capability is enacted by practitioners who participate in the complex web of material artefacts, relationships among people, and activities in a setting (Gherardi, 2001)

or ‘domain where doing and knowing are one and the same’ (Gherardi, 2006: xii). Therefore, for Gherardi, knowing and practice are ontologically equivalent.

Innovation has traditionally been characterized as a linear, sequential and rational undertaking (Rothwell, 1992; Bhave, 1996; Francis & Bessant, 2005), more recently as a discontinuous and sometimes chaotic process (Cheng & Van de Ven, 1996; Van de Ven, Polley, Garud & Venkataraman, 1999) or also as a social system (Fuglsang & Sundbo, 2005). Gherardi’s (2012) latest approach proposes a melding of traditional views of innovation with interpretive approaches such as practice-based theorizations.

In a practice-based approach of innovation, Gherardi asserts that innovation is a ‘continuous phenomenon situated in practice’ (Gherardi, 2012: 227). By accounting for contextual circumstances, tensions and contradictions (texture of organizing) that may surround innovation, a practice-based approach extends understanding of organizational conditions that influence innovation, thereby foregrounding the potential ways in which innovation occurs in everyday work. This essentially dissolves arbitrary distinctions ‘among working, learning and innovating’ (Gherardi, 2012: 227).

In interweaving knowing, doing and innovating in the enactment of practices, the practices that shape and progress work are continuously refined (Gherardi, 2012: 228) and adapted. Innovation may come about amid the tensions between new and old knowledge and the knowing that is carried forward in practicing. Sites of innovation are co-incident with the sites of practicing and knowing in this extension to Gherardi’s original concept of knowing-in-practice (Gherardi, 2009).

In summary for all three theorists, the physical and symbolic organizational site where dualities must be negotiated can represent sources of productive tension that can lead to remaking and re-inventing work practices needed for changing contexts of work. Dualities are often accommodated in the collective search for workable solutions that best fit the unique combination of circumstances, stakeholder interests and practitioner capabilities that frame the work to be accomplished.

We now describe three examples of Australian public sector work where practices are challenged by NPM drivers. We first describe the local contexts and priorities of work at an emergency department (ED) of a hospital (EDCo), a local government council (CouncilCo) and a corrections centre (CorrCo) and then discuss our research findings on their work practices and the results that emerged.

Three sites of re-organized public sector work

We three co-authors are researchers in a research centre at the University of Technology, Sydney (UTS) where we have applied and challenged practice theory concepts in separate empirical research projects that occurred over the last three years. The UTS faculty research programme resulted in a recent book (where we are also authors and co-authors) theorizing the relationships among

practice, learning and change (Hager, Lee & Reich, 2012). We used our investigations of different Australian public sector sites to discuss similarities (e.g. the common influence of NPM drivers in their industries) and differences, questioning the conditions that influenced creating or remaking (thus innovating) the practices (or not) that underpinned work in these organizations.

For example, Manidis examined the nature of hospital ED knowing as demonstrated by healthcare actions and communications occurring among medical practitioners and incoming patients. Price investigated a local government council site that restructured work to deliver increased business efficiencies. Johnsson studied the interprofessional learning of practitioners charged with operationalizing a new therapeutic model of offender rehabilitation that contrasted with the prevailing corrections institutional norm that incarcerated offenders and made rehabilitation optional. Table 1 below summarizes the contextual conditions within which our three investigations occurred.

Table 1 Summary of Contextual Conditions in Three Public Sector Sites

	EDCo Hospital	CouncilCo Local government	CorrCo Corrections centre
'Public good' NPM driver introducing work duality tensions Re-organizing principles	Quality ED care Improve efficiency of ED patient care	Community service New business and customer imperatives	Reduce recidivism Use of a therapeutic jurisprudence model
Typical work practices	Streamline and expedite ED care	New structure (call centre) with customer service goals	Dedicated separate unit, distinct from the institutional system
Practitioner roles	Triaging Diagnosing Treating X-raying Doing shift handovers	Assisting residents to access services Delivering services to the community	Custody & security Medical treatments Alcohol & drug counselling Educational reskilling Parole & probation
	Doctors Nurses Other specialists Paramedics	Customer service staff Waste services Rates services Maintenance staff Rangers	Custody officers Medical doctors Psychologists/psychiatrists Vocational teachers Parole officers

In all three research sites, most of the practitioners mentioned are also employees of their organizations. Being an employee involves more than being a worker employed to perform a designated job and contribute to organizational work. The employee relation encompasses complex power relations (that may reflect formal positional authorities and/or informal peer relationships), understandings of cultural values, engagement and change processes that influence the organizational context and evolving occupational and social identities that can cross organizational boundaries (Blackler & McDonald, 2000; Macey & Schneider, 2008; Veenswijk, 2005). We raise these relational issues now because later in our Discussion section, we comment on the phenomenon that others call *employee-driven innovation* (Høyrup et al., 2012). We prefer to use the more gen-

eral term ‘practitioner’ in our paper because our analytical focus is on *practice*-based innovation in public sector work and we believe that our contributions encompass but go beyond workers contracted in an employment relationship. In our three empirical discussions, important participants in driving change include governmental authorities who function as legislative bodies, policy-makers and program sponsors and whose views may be influenced by external consultant advisers or community activists, as well as employees within, for example, the hospital, local government council or corrections centre.

Methodologically, all three investigations utilized ethnographic qualitative research designs focused on work practices and the forces that maintained or changed them. At sites where practitioners performed their everyday work, we recorded *in situ* work conversations (with permission) and conducted semi-structured interviews for further sociolinguistic analysis. We observed practitioner interactions and documented extensive field notes. We used interview transcripts and document analyses to understand how and why practitioners performed work or changed work in the ways they did. We paid attention to the spaces and configurations of work, material arrangements (documents, reports, forms, notices, policies, procedures, other artefacts of work) and to how practitioners interacted with non-human materials and other practitioners within these contexts of work. All names used are pseudonyms.

Findings: Three sites for innovating-in-practice (or not)

Here we present findings from our three investigations in sequence, discussing how work organization dualities are perceived and negotiated resulting in what we describe as variable levels of innovation. We then compare our findings from these sites to draw out implications for innovating-in-practice.

Site1: Where efficiencies are seen as knowing barriers to innovating in EDCo

Patients who need emergency hospital care often present with life-threatening symptoms that must be diagnosed and treated accurately and promptly to deliver quality care. ED redesign processes in Australia have focused on a number of NPM interventions:

- to improve the overall efficiency of ED care due to demographic and cost pressures, and
- to better manage increases in seasonal and general patient presentations,

with the expectation that *faster* yet still *quality* ED care will result. These include, amongst others, the introduction of Information Communications and Technology (ICT) monitoring tools (one such tool is known as JONAH) and new four-hour rule parameters (Geelhoed, 2012) for length of patient stay in

some EDs, now known as the National Emergency Access Target or NEAT (Emergency Care Institute NSW, 2014).

In the first instance with implementing JONAH as a new work practice, some findings from Manidis' research shows that the work organization duality between the efficiency and quality of ED care is unable to be resolved. JONAH was introduced into New South Wales (NSW) state public hospitals in 2005, but was ultimately rejected by doctors and subsequently taken out in 2008.

In better understanding why this was not an innovation that worked or improved ED care, the Director of Nursing at EDCo, who is supportive of ICT monitoring tools, observes:

So there's JONAH in the ED that's supposed to be used as a tracking and support system for patient flow ... a patient is waiting [e.g. for a CT scan] it's a way of sort of knowing [for ED managers] ... I need four patients to be reviewed by the medical registrar or I need a bed.

Now JONAH is a fantastic tracking system. I can [use] JONAH ... and know what's going on in the emergency department. If it's used properly. Unfortunately it's been left to the nurses to do [because the doctors are rejecting it as an efficiency tool].

This rejection is evident in the words of a senior staff specialist (medical doctor) who sees JONAH as a poor substitute for accurately understanding the patient's situation and the patient flow within the ED:

[The ED managers] come up with brilliant ideas, or they come up with ideas that are forced on them [by the health department] ... I mean JONAH ... should've been called JOKE rather than JONAH ... it's a failure, because it doesn't actually do what it really needs to do. None of our [ED] managers actually get the information they really need ... they think they understand what's happening, but they don't actually sit down and listen to the [medical doctor of the ED] and to the head nurse ... [the ED managers] have no concept of what's happening.

A second example of introducing efficiencies into ED care that could conflict with practitioner notions of quality care is the four-hour rule (Geelhoed, 2012), implemented as the Four Hour Rule Program (FHRP). This initiative is currently being promoted through funding incentives to Australian hospitals if benchmarks are met for moving patients through EDs within certain timeframes. The federal government has set a national 2015 benchmark of 90% of Australian patients treated (admitted to a bed or discharged) within four hours with interim goals by states over the 2012-2014 improvement timeframe (Hagan, 2012). Progress within NSW has been slow with seven NSW emergency hospitals ranked in Australia's bottom ten performers against a 2012 goal of 69%, putting \$15.9 million of contingent efficiency bonus funding at risk (Cordery, 2012). More recent figures show that NSW hospitals have just passed this target by achieving 71% of patients not subsequently admitted to the hospital through the ED during 2012-2013 (Australian Institute of Health and Welfare, 2013: 34).

The Australian FHRP is perceived by some healthcare providers as similar to Canadian healthcare efforts to apply an engineering approach (specifically, Toyota Lean Production principles) to reduce emergency care wait times (Ng, Vali, Thomas & Schmidt, 2010). Clearly, the work practice here (and in Canada) favoured by health administrators and policymakers is one of production line efficiency in the spirit of Chaston's (2011) assumption that economics and efficiency will result in effectiveness. Applying an engineering sciences approach to healthcare means

largely driving out variation or bringing ever larger "scale", uniform care delivery via processes such as ... Toyota Lean Production [rather than understanding that improvements emerge only between people interacting in real time (Introcaso, 2012).

In some preliminary findings from a recent review of the FHRP:

[t]he FHRP has seen significant improvement in patient flow across all Stage One Hospitals [university-affiliated training hospitals involved in trialling the FHRP]. The Reviewer consulted with over 315 health workers and no one indicated a desire to return to pre-FHRP processes. However, many areas are struggling with the changes it has brought, and this required revisiting some key reform concepts (Stokes, 2011: 3).

Practitioners involved in the FHRP argue there are no official channels to voice complaints about the changes, which require extensive and 'sustained executive support and accountability' (Stokes, 2011: 3) as well as ongoing collective engagement by all.

This collective engagement of *in situ* medical practices among practitioners is messy, complex and emergent in several interrelated ways:

- In the ED, nurses and doctors duplicate and demarcate tasks based on their need to do so in the socio-material setting of the ED and as patient conditions change.
- As observed by Reckwitz (2002), practitioners are strongly attached to practice knowledges (what they *know*) and particular practices (what they *do*). Knowledge is not fixed or neutral; it is shaped by epistemological possessiveness and influenced by the political power relations of knowledge hierarchies that exist in the ED.
- Practices are also teleo-affectively structured for certain purposes and towards certain ends in the ED (Lowthian, Stoelwinder, McNeil & Cameron, 2012).

Practitioners maintain particular ways of doing, being and saying, and in the case of EDCo, they draw on 'enduring' (Roter, 2000) and 'proximal and participatory' (Manidis, 2013) ways of relating to patients. Although some medical and nursing colleagues propose changes to the ways the ED might be organized (e.g. Hitchcock, 2012), Manidis' data shows that practitioners working in the ED timespace and across disciplinary divides remain strongly attached to what they do and say, despite the promotion of more streamlined solutions. As long as

practitioners continue to enact *their* local ED practices rather than those of healthcare administrators or ED managers, sustainable innovation imposed from outside practice is a risky undertaking.

Site2: Negotiating innovative practice understandings of the customer at CouncilCo

In Australia, local government councils provide community services within a designated geographic area for which residents pay council rates (hence the term 'ratepayer'). In Price's research, the signal for change is led by a new General Manager with private sector experience, who challenges council workers to embrace NPM mandates by introducing business efficiencies into CouncilCo services and redefining ratepayers as 'customers' (newly-introduced business language).

As many of these business efficiencies are implemented (e.g. a newly-established Customer Service call centre to reduce the expense of over-the-counter personal service and to improve council responsiveness; electronic booking requests for waste services; electronic payment of rates), council workers find ways to resolve work organization dualities by adapting the spirit of efficient business service practices to be also pragmatic and responsive.

For example, Kevin, a long-term Customer Service Officer in the newly-established Customer Service call centre, believes his core role is to help people:

You look at the job description you only have a brief outline... whenever you start the job you realise that there are so many fields that off shoot ... there is so much more than that...when you are helping people.

[for example] CouncilCo has a Clean-up Service where you call us and we make an appointment for it and the resident [can only] put the rubbish at the front the night before [the scheduled collection date]... we get a lot of calls from aged people who unfortunately don't have any family, don't have any contact with their neighbours...so they're virtually stuck....I set up a thing with Kate [Team Leader Waste Officers] to organize unbeknown to CouncilCo, someone from the Waste Office to go out and help the elderly person put their clean-up stuff out. And in most cases if it was just a washing machine, they used to put it at the back of the Ute [utility truck] and take it away the same day...there's all those little things that you step outside the boundary for. [another example is for rates payments where elderly people find it too difficult to write a letter or for residents not from an English speaking background] ...I could call Keith who is in charge of the Rates department and he would say 'ok send me an email and we'll wipe-off the interest'...

By not simply taking a Clean-up Service booking and explaining the official council policy to his elderly customers or proactively writing rates submissions

on behalf of disadvantaged customers, Kevin is remaking his work practices and enacting what it means to become a Customer Service Officer in a NPM-focused council. In negotiating alternative practices with others within CouncilCo (such as the Waste Services Team Leader or the Rates Team Leader), Kevin is also impacting and changing the work practices of other practitioners in the same organization. In the rates payment example, Kevin negotiates the economic business imperative of revenue collection by tailoring a responsive public service to the specialized needs of his stakeholders.

Similarly, Guy, the Community Services Manager, sees his role as a 'social entrepreneur'. He takes an entrepreneurial approach to delivering community services (e.g. open access library, meals on wheels services, childhood immunizations), trying to overcome the difficulties encountered in what he describes as

equat[ing] the value of a project of wellbeing for the community or the value that a library may bring to a family over 50 years...[as opposed to some other investment or service for which CouncilCo can demonstrate a return-on-asset value] and that's always been a toughie to win in terms of traditional senior management structure if they're economic rationalists...the social entrepreneur [is] really about my view on how I can build a stronger community development area through some entrepreneurial approaches.

Guy shares how he was able to access private donations, for example, to fund a community group of 'senior women looking for some support to do things [for seniors in the area]– well ten grand [\$10,000] just came along straight up – I've worked with some of the private donation organizations to get some programs up in [this area]'. By utilizing entrepreneurial approaches and networking with philanthropic organizations from the city's wealthiest suburbs, Guy is enacting work practices to achieve better outcomes for local community groups in a manner that maintains the public good mandate for CouncilCo while continuing to perform his job by contributing to CouncilCo's performance-oriented progress in a NPM era.

Site3: Innovating systemically 'outside' disciplinary competence at CorrCo

A conventional corrections centre in Australia incarcerates offenders as a form of punishment for offenders and to protect the community at-large. Rehabilitation is offered as an option during incarceration but is not considered a primary goal. For chronic drug offenders, legislation was passed in NSW to operationalize a therapeutic jurisprudence model (Wexler & Winick, 1996) intended to reduce recidivism, thus gaining public good benefits of offender integration back into the community, community safety and reduced burden on the prison system.

Structurally, a dedicated centre (CorrCo) is established to house these (all male) offenders separate from the prison system. Strategically, the centre is led by a Director (by professional training, a psychologist) who sets a holistic vision that successful rehabilitation requires systemic organizational change: change in

individual behaviour and centre work practices must be designed together between the offenders (or inmates but in this program, called ‘participants’) and the correctional staff as shared responsibilities for rehabilitation. This vision poses operational work challenges for the corrections professional staff who are Johnsson’s primary research focus (due to ethics clearances). These staff members are conventionally trained in the knowledges and practices required by their individual professions (custody, medicine, psychiatry, psychology, alcohol and drug counselling, vocational education and parole). Their views of inter-professional work typically constitute clearly delineated handovers or handling points of coordination at certain sequential stages of a participant’s incarceration.

For CorrCo to succeed, changing the organizational design (dedicated centre rather than an additional program within the existing prison system) or having a strategic vision for change (facilitative leadership) or resourcing the program with experienced practitioners who know their disciplinary knowledge is not enough. Work practices had to be re-invented for the contextual conditions and in fact, as Johnsson learned over our several months at the site, as conditions continued to change.

Stuart, a custody officer, illustrates the example of urine testing and how staff-participant interactions generate new ways of working:

Even the urine [testing] procedures we do ... we couldn’t even fathom how it was going to affect us ... in a traditional setup, you normally do a random sample – 10% of your population. Well, here, we doing for every offender, within Stage 1, we’re doing two urines and three. We had to think how do we change the process ... because we haven’t got the resources. So we started saying let’s stretch ... and put the onus back on the ... inmates. In a traditional [system], that’s frowned upon because it gives them opportunity to manipulate. So we had to be careful not to ... give them ownership but at the same time, make sure that we control the process.

The resultant pragmatic solution used was actually suggested by a psychology intern on work experience during a team brainstorming meeting. However, less than month later, during a staff-participant meeting, the Director was surprised by unexpectedly helpful disclosures by the participants themselves:

And they gave [us] strategies for how to ensure [the centre] got more reliable urine tests [from them]. [Our process was] you keep them for two hours; if they still haven’t provided a sample, you say, oh well, we’ll deal with it later. They said, don’t just let us go after two hours, keep us there for four hours until we deliver. Or the oral swabs aren’t working as well, things like that. That’s a very curious thing ... but in this place, it’s ... much more open communication and it is amazing what people will say.

The urine-testing work practice was one of several work practices that constituted examples of innovating-in-practice at this site. The practitioners had to learn together what it means to ‘know’ this kind of work in contexts that contin-

ued to change. While still utilizing their disciplinary competencies, they learn to work in the overlaps across disciplines (Hager & Johnsson, 2009) to deliver the goals of this enterprise.

A second example of innovating-in-practice was the new leave pass system needed by Tara, a parole officer working atypically with her custody officer colleagues, with whom in a traditional prison system, she would normally have limited interactions. The standard operating norm of leave passes *after* incarceration would not work as this centre wanted to grant parole leave *during* incarceration for family visits and work attendance as a trust-based rehabilitation learning strategy. Tara reflects on the negotiations she had with her colleagues about the manner and modes of participant monitoring and supervision during a leave pass period. As Tara noted:

I said to them: ‘what do I do about getting this guy to a bus stop to get himself to work? So he’s less dependent on us so he can start to have a bit more independence?’ Because I don’t know much about the leave passes [normally implemented by custody staff]. They said: ‘That’s all right – you can take him up there; we’ll just do a variation on this pass ... you take him up to the bus stop, I’m going to follow him up to here... that will be the first day, the second day, he can do it all on his own. ... you know, nothing [here] is typical ... we had to start thinking out of the square ... we had to try it; we haven’t asked permission to try it, we just went with it.

Was this site a perfect example of successful rehabilitation? No. There were incidents of participant regression and during the research period, an incident of a participant death in the community. Yet new conditions and requirements for making the work operationally ‘work’ challenged these practitioners to accommodate work organization dualities by innovating together new work practices that delivered the rehabilitative vision of the corrections centre.

Discussion: Implications and conditions for innovating-in-practice

Our brief discussions of these three public sector sites illustrate that innovations may occur (or not), discovered from the conditions that structure work practices rather than directed by reform signals through organizational design. Organizational design alterations can represent initial mechanisms to disrupt the stability of existing work practices and to preview expectations of changed behavior, culture and performance (e.g. ‘we need patients treated within four hours at EDCo’; ‘we need to run the CouncilCo call centre according to business performance measures’; ‘we need to therapeutically rehabilitate drug offenders at CorrCo’). Yet organizational design or process solutions are insufficient on their own, we claim, to generate sustainable innovation at the work practice level ... where work actually happens.

Our research findings suggest that when presented with work organization dualities, practitioners discover ways to develop innovative solutions that, under

certain conditions, become embedded work practices. The changed urine testing procedures at CorrCo has become a collectively-invented institutional work practice for the organizational conditions demanded by having to test every participant. From a cynical perspective, the clean-up work practice at CouncilCo could be regarded as a benign ‘work around’ to advantage a certain segment of CouncilCo customers. Yet from another perspective, we argue that it maintains the helping people/serving others culture of public service that must now co-exist and comply with the continuing NPM orientation to service delivery.

However at EDCo, the strength of practitioner epistemological possessiveness in our case study continued to be a barrier to the creation of innovative ED care practices that could be *both* efficient *and* effective. Rather than a valuable tool to support practitioners with better information for diagnosis making and status management, JONAH was considered a threat to some practitioners and a proxy for their medical expertise. ‘Rejection in use’ can be a powerful political barrier that here, resulted in how this particular work organization duality was resolved in favour of maintaining prevailing practices. While JONAH was completely rejected, practitioners are trying to comply with NEAT; however they argue for its benefits along medical, not efficiency, lines.

These three empirical illustrations highlight to some extent, the opportunistic nature and settings within which potentially innovative work practices are enacted by employee practitioners in the negotiation of work. A structure-based organizational approach to innovation typically consolidates workers into a central product development unit responsible for technology, product or service innovations to generate competitive advantage for their organizations (e.g. Dougherty, 1999) – as if segregating those who *should* innovate from those who don’t. In public sector organizations, the focus of this paper, rallying cries for culture change interventions (e.g. Veenswijk, 2005) distance even further the actual work to be changed or innovated from the practitioners, their enabling processes and their material arrangements. The ‘grass roots’ modes of practice-based innovation that two of our three examples illustrate could be labelled by some organizational researchers, dominantly from Scandinavia, as examples of user-driven or employee-driven innovation (Hasu, Saari & Mattelmäki, 2011; Høyrup et al., 2012).

The emergence of employee-driven innovation (EDI)

What does it really mean to take up the notion that innovations can arise from ‘everyday improvisations’ (Fenwick 2012b: ix) or from how ‘the everyday cultural practices of workers – the ways workers enact their jobs, interact with each other ... [can meet] their own interests and desires as well as those of their employers’? (Price et al., 2012: 77-78). We believe that by focusing researcher attention analytically on the nuances of practices, we gain richer representations of how work is navigated and constantly accommodated at the sharp end of practice. It is amidst these seemingly chaotic workings of practice that clear choices for action in fact are made every day. These practical judgements give researchers insights into how opportunities for innovating and taking new paths

of actions are taken up or not, and how knowing, learning and the materialities of local circumstances are negotiated through collective actions that result in potentially innovative work practices.

That innovating, knowing and learning are interconnected in complex ways that contribute to managing the challenges of organized work has long been recognized by researchers (Brown & Duguid, 1991; Gherardi, 2001, 2009, 2012; Orlikowski, 2002; Simpson, 2002) and recently discussed as it applies to public sector work (Bason, 2010; Ferguson et al., 2013). In discussing the emergence of EDI as well as more general modes of practice-based innovation, we highlight two specific features that differentiate this mode of innovation from traditional structural, linear or rational views of innovation.

First, innovating can occur at the local job and worker level – accidentally, coincidentally or informally (Høyrup, 2013: 8) through how practitioners apply their context-dependent knowing. Our concept of *innovating-in-practice* borrows, with acknowledged respect, from Gherardi's parallel concept of *knowing-in-practice* (Gherardi, 2009: 117, our italics). Habitual or pre-figured practices (how we did this before) represent ways of doing and saying that have worked under prior contextual conditions. Signals for change such as new NPM designs revise goal expectations that ultimately must become embedded into current work practices that also guide future work practices. It is only in the nexus of the present in re-assessing current contextual conditions, and in performing knowing as a *practical accomplishment* (Gherardi, 2009: 117, our italics) that the outcomes of innovation are discovered and sustained (or rejected) together.

Second, the presence of work organization dualities allow practitioners to interrogate together what is now needed to address the current conditions; to negotiate together what actions are appropriate axiologically (what ought we do?), pragmatically (what can we do?) and politically (what do we want to do?). In doing so, innovating-in-practice exhibits a *collective accomplishment*, in that this kind of knowing is distributed among practitioners (Orlikowski, 2002), emerges from their interactions and requires developing new capacities in collective competence and collective learning (Hager & Johnsson, 2009, 2012). This raises what we believe is a slight syntactical problem with the EDI label as *employee-driven* innovation, although obviously the term can be taken in both its individual and collective meanings. Practice cannot exclude practitioners, but a practice-based view does not privilege individual practitioners as central to the analytical focus. It recognizes the inherently social and extra individual nature of practice and of practitioners who practice together. It also acknowledges the public nature of organized work where engagement, whether considered creative or not, automatically involves relational accountability to others whether internal or external to the organization.

Conditions for innovating-in-practice in public sector and other contexts

The challenge for researchers and practitioners is that if innovating can occur basically anywhere within an organization and emerge accidentally or opportunistically, to what extent can innovation really be facilitated if not mandated struc-

turally or process-wise by management? In keeping with the theme of this paper, we do not believe the choices to act ought to be positioned so simplistically as a duality. Our view is that the conventional top-down approach to change and innovation management that favours structural design solutions is a common, perhaps necessary, but often insufficient, condition for enacting needed organizational change and innovation.

Alternatively, if we view organizations as constantly reconstructing ‘bundle[s] of practices and material arrangements’ (Schatzki, 2006: 1863), innovating within and in the learning spaces across and in-between work practices is less visible (so perhaps not often publicized) but represent no less important accomplishments. Public sector organizations are particularly interesting to research because they bring to the fore, numerous work organizational dualities and tensions that must be negotiated. In public sector work, there are multiple and differing stakeholder interests, community interests that encompass particular concerns for disadvantaged members, public policy considerations and broader societal concerns that go beyond the economic rationalism or competitive market concerns of any one commercial enterprise. In attending to:

- how these work organization dualities are resolved,
- which issues considered collectively and locally relevant,
- how practitioners use organizational artefacts, materials and processes to signal choices and their significance for action, and
- what the consequences and outcomes of changing practices are,

we gain a richer perspective of how work is understood, enacted and adapted. Further, we can review and reflect upon how ‘the relationship between workers and organizations has shifted dramatically ... [in ways that] can open up possibilities for workers to be self-directed and creative’ (Price et al., 2012: 77). Workers now are inadvertent continuous (re)producers of new knowledge in their organizations – they represent knowledgeable accidental innovators in the ongoing discovery and sustainability of their enterprises. We believe this perspective provides a more inclusive view of innovation as an engagement process, one that democratizes innovation and challenges the privileging of structural solutions (i.e. where only those in the new product development function should innovate).

The causal drivers of successful innovations are not always obvious and are risky to generalize exactly because work practices are complex negotiated arrangements that continue to change. The challenge for practitioners who deliver work under constant mandates for change, is to use such changes as opportunities to enact innovation and learning rather than as restrictive mechanisms of economic rationalism. To practice innovation under these conditions is to reveal the ingenuity of human minds imbued with the public good of the human spirit that productively ‘troubles’ reform in ways that (can) create shared organizational futures.

Conclusion

Our research paper has interpreted Sánchez-Runde et al.'s (2003) concept of work organization dualities as conditions for innovating-in-practice drawing from practice theory concepts developed by Schatzki (2006), Pickering (1993) and Gherardi (2009). Our empirical illustrations of public sector innovations show how practitioners accommodate and negotiate broader NPM change imperatives and their local circumstances to (re)create 'workable' operating practices. Using practice theory to re-view the phenomenon of innovating provides a useful analytic lens through which researchers can better understand changing work and how work practices change.

Acknowledgements

We acknowledge funding support for our empirical investigations from the Australian Research Council. Manidis' work was funded by Linkage grant LP0775435; Price's work by Discovery grant DP0888615 and Johnsson's work by Discovery grant DP0453091. An earlier draft of this paper was presented as a conference paper to the 2013 International HELIX Conference on Innovative Practices in Work, Organisation and Regional Development: Problems and Prospects during 12-14 June in Linköping Sweden.

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