# Escaping silence: A communities of practice view on learning from innovation in the health sector

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#### Introduction

This article contributes to our understanding of the power of communities of practice (CoPs) to move innovation forward in organisations illustrating how managers, armed with the benefits of collaborating and sharing ideas on practices of innovation management, can renegotiate the power relations in their organisations to achieve mobilisation for and social acceptance of their innovation initiatives.

Even though early studies on CoPs argued how important they are for learning and innovation (Brown & Duguid, 1991; Wenger, 2000) later scholars argued that many radical innovation and knowledge breakthroughs fail to be translated into practice in CoPs as they do not align well with the existing practices of the CoP (Newell et al., 2006; Robertson, 2007). Such 'competence destroying' innovations (Christensen et al., 2000) will inevitably result in a redefinition and reconfiguration of power relations within and across CoPs (Mork et al., 2010). This view is supported by the insights from the systems thinking literature which would argue that systems, and hence CoPs, change their processes and practices within limits defined by their response repertoire (Wilden, 1972). This repertoire, however, becomes more limited as the system optimises its capacity around responses that have previously been successful constraining the potential for change over time (Wilden, 1972). Baburoglu (1993) observes that systems typically require action from outside their existing system structure for innovation to happen and cannot usually change what they do from within the system This is line with the arguments put forth by scholars like Blackler (1995) and Swan et al. (2002) suggesting that most radical innovation happens in the interstices between CoPs rather than within.

However, Wenger (1998) theorises that when we talk about CoPs at work and in organisations we are really talking about a constellation of communities, with some individuals belonging to

multiple CoPs at various levels of core versus peripheral membership. If this is the case what happens when an individual member in a CoP changes their practice in the light of their experiences in another CoP? We will be exploring this question from an actor network theory perspective, illustrating how relations in and practices of one CoP may be reconfigured as a result of actors' participation to an extramural CoP. "Both innovating and maintaining status quo are matters of establishing and stabilizing heterogeneous networks—of ideas, human actors, technologies" (Mork et al., 2010: 578) and our analyses will highlight how an intramural network in one CoP, which acts as an obstacle to innovation, is renegotiated with the help of practices the actor gained in another, extramural, CoP allowing the innovation to move forward.

In the following sections, we begin with a literature review to establish the theoretical foundations of CoPs and discuss the relevance and value of actor-network theory to the study of CoPs. Having presented the methodological approach, we then explore the interactions and inter-communication points between two CoPs we studied to identify the ways in which these led to the reconfiguration of practices improving innovation outcomes.

## **Theoretical Background**

In this paper we adopted Wenger's (1998) definition of CoP – a group that coheres through mutual engagement on an indigenous enterprise and creating a common repertoire (Wenger, 1998). CoPs are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Snyder et al., 2003, p. 17). The interactive element suggest that CoPs are spaces through which 'communicative action' can take place (Polanyi, 2002; O'Donnell et al., 2003). CoPs are said to exist at the intersection of intellectual and social capital (Snyder et al., 2003; O'Donnell et al., 2003; Wenger, 2004) and as such mastery is a collectively achieved property of the CoP, not merely an individual achievement (Lave & Wenger, 1991). Even though early scholars in the field focussed predominantly on the reproduction of practices within the CoP, rather than with the modification and change of those practices through innovation (Fox, 2000; Mork et al., 2010). Over the past two decades research has started to explore the difficulties and possibilities that shared practice creates when experiences are modified and extended (Gherardi & Nicolini, 2002).

Even though Gajda & Koliba (2007) argues that CoPs have the capacity to evaluate its current practices and conditions and learn through this evaluation by dialoguing which can then be translated into decisions and actions in a process of cyclical inquiry, the difficulties identified typically stem from the path dependency of (situated) learning processes central to the formation and maintenance of the CoP. This can become an obstacle to radical innovation (Roberts, 2006). "[CoPs can] become resistant to other interpretations [of knowledge] that they have not themselves validated by trial and error. This resistance, given the inevitable solidarity that comes to characterise well-established communities of practice, becomes a barrier to innovation and a barrier to the transfer of knowledge across CoPs" (Zorn & Taylor, 2004, p.109). Zorn and Taylor's observations regarding the potential negative consequences of CoP activity for innovation are further supported by Roberts (2006) who observes that CoPs develop certain habitus to interpret their contexts, events, knowledge, information and so on which creates a predisposition for negotiation of particular types of meaning detrimental to other possible interpretations.

Following Fox (2000) and Contu & Willmott's (2003) call for more research acknowledging the power dynamics in CoPs, scholars started to recognise that innovations can be seen as threats in CoPs (e.g. Hislop, 2003). The discourse in CoPs are shaped by 'knowledge brokers' (Burk, 2000; Zook, 2004) and the innovations can challenge the mutually defining identities of individuals and the collective, which are a by-product of the shared discourse of the CoP and reflect a certain perspective of the world (Wenger, 1998). Organisations and people tend to forget or hide most of the controversy involved in the making and implementation of an innovation (Latour, 1996), including their politicized and contested character (Brekke, 2009; Brown & Eisenhardt, 1995). In fact, innovation is an intensely 'political act, taking place within a network of partisan interactions' (Drazin, 1990: 252) calling for a redistribution of power (Murakami, 1995) and (re)definition of identities and social roles (Harrison & Laberge, 2002) so that alliances can be formed (Munro, 1995). This is an intense period which challenges the legitimacy of extant identities, social roles, and co-operations. In this respect, CoPs can act as a barrier for innovation with members maintaining or defending their identities (which they have constructed in relation to the CoP and to practices of that CoP) and their claims to legitimate control over a function or domain of action/knowledge in the organisation.

Conversely, if we go back to Wenger's (1998) conceptualisation, the sustained mutual relationship between members of the CoP characterised by shared language, local lore and shortcuts to communication offer possibilities for the propagation of innovation. The

perspective of social construction of innovation shows how innovation results from a process of meaning making (Woolgar, 1981). The implication is that innovations depend on and are shaped by interaction with others (Fagerberg, 2005). Sometimes innovations fail to take root when they fail to connect to critical actors (Hoholm & Araujo, 2011; Latour, 1996). From an actor-network theory perspective emergence and institutionalisation of innovation happens after a process of successful *interessment* and enrolment (Callon, 1986). This process requires the focal actor to mobilise instruments and conceptualisations of the world and to build alliances (Latour, 1999). During this process the focal actor tries to translate the interests of other actors in an effort to enrol them and to achieve some level of acceptance of innovation by other actors in the network (Latour, 1999). The process relies on the focal actor expressing "in one's own language what others say and want, why they act in the way they do and how they associate with each other... At the end of the process, if it is successful, only voices speaking in unison will be heard" (Callon, 1986: 223).

In this *model of interessment* "the fate of the innovation depends on the active participation of all those who have decided to develop it" (Akrich et al., 2002: 208) making the process of translation of greater importance than the intrinsic qualities of the innovation itself (Akrich et al., 2002). Arguably, this process of translation and mobilisation is easier to achieve in CoPs where the shared practices and language give an advantage to the focal actor for progressively loading the non-human actors into the discourse (Latour, 1999: 90). The discourse of CoP has the potential to act as a boundary object to facilitate new encounters, links, networks and alliances (Swan et al., 2002). Support for innovation can be mobilised using the CoP by aligning a range of actors and facilitating the flow of knowledge about the innovation and interests across the CoP (Swan et al., 2002). The process of translation requires the focal actor to recognise the interests of related actors' that are often multi-dimensional (Sarker et al., 2006). CoP membership equips actors with the ability to read the local context and to participate in the complex web of people and interactions in ways that are recognised and valued by other actors who are members of the CoP (Contu & Willmott, 2003: 285). We argue, this makes it easier to build mobilisation and interessment strategies dynamically around actors' interests and emerging alliances. Moreover, actor-network theory, with its emphasis on the self-interests of actors suggests that the vision by leadership may not be widely shared throughout the actornetwork (Sarker et al., 2006) allowing room for multivocality. This is critical for creativity and innovation, which however disrupts the unitary, harmonious image of a CoP frequently portrayed in the literature (Contu & Willmott, 2003).

However, if participation in CoPs subjects members to a process of identity construction (Lave & Wenger, 1991) influencing members' understanding of 'self' through a process of understanding who they are (Handley et al., 2006) in this environment where their individual identities are closely tied to that of the community how will members find 'voice' to talk about opportunities that innovation offers? When 'voice' carries the risk of isolation (Bowen and Blackmon, 2003) will members of CoP not choose to be silent about innovation opportunities as a self-protective, defensive strategy? Is the path-dependent behaviour observed by scholars like Roberts (2006) tied to the identity regulation and identity work (see Alvesson & Willmott, 2002) characterising CoPs? We argue that an answer may lie membership of multiple CoPs. In fact, Wenger's conceptualisation of CoP represents the organisational landscape as a constellation of communities, with some individuals belonging to multiple CoPs at various levels of core versus peripheral membership (Wenger, 1998). In discussing this he focuses on stresses and tensions arising from multi-membership of different communities and explores implications for social identity (Wenger, 1998). Whilst acknowledging the difficulties associated with multi-membership we are curious about the possibilities it offers for the propagation of innovation within CoPs. Can an individual member in a CoP change their practice in the light of their experiences in another CoP? How does this affect the actor-network within that CoP? Can multi-membership bring potential for reconfiguration of power relations and reconstruction of identity with implications of adoption of new practices? We will be exploring these questions in the context of the UK health service looking at the experiences of senior managers who as established members of their intra-organisational communities of practice (which we henceforth call as intramural CoPs) participate to a leadership development programme to build their managerial capabilities to lead on innovation projects. In this leadership programme the managers form, what we call, an extramural CoP as they share their experiences of and practices for managing innovation creating a common repertoire and a shared discourse which results in much tigheer relations than what we would expect to see in an inter-organisational community, such as Brown & Duguid's (2001) networks of practices. It is the details of the research context that we observed and studied these intramural and extramural communities we now turn our attention to.

#### Methods

Broadly speaking, we used an interpretive case study approach to guide the collection and analysis of data. Data were collected from the participants of two similar yet distinct innovation leadership development programme, (henceforth ILP) – the first designed for senior managers close to Board level, the second for frontline managers at different stages of their career and different levels in their organisations, all involved in improving patient care. Each programme had 10-13 contact days over 8-10 months. The programme was created in 2012 to close the gap between innovation generation and innovation adoption in the UK health care setting which was deemed essential to address the scale of change and innovation challenge the sector.

The ILP takes a relational, experiential approach to learning, focusing on and role modelling four key themes linked to developing a climate supportive of innovation: re-connecting with purpose; innovating live for patient improvement; improving the team climate for high discretionary effort; and using power and authority to engage the team (see Figure 1 below). ILP is a 'living laboratory' to help participants experience key leadership challenges in a safe, low-risk environment, a deliberate 'parallel-processing', so that participants first experience learning around the above key themes in the 'classroom'. A range of psychometrics and diagnostics, inter-module activities, dialogue sessions, experiential learning opportunities, debriefs and reflections on learning help participants to contextualise their leadership learning and to adopt new leadership practices in their own workplaces.

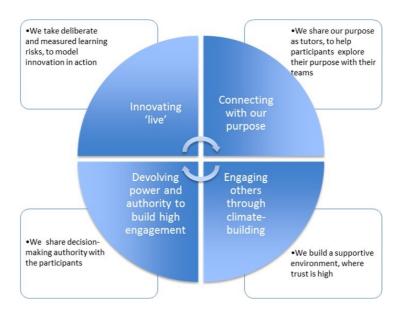


Figure 1: Learning approach of the ILP programme

Since 2012, ILP has been moulded by an ongoing research-led approach as the programme staff were also commissioned the regional health authority to explore impact of leadership and leadership learning on innovation. The delivery and input from the participants, as well as the outcomes of ongoing impact measurement research contributed to programme development whilst remaining fateful to the core elements in Figure 1. Over the past 7 years the two programmes combined reached 240 participants across 8 cohorts. Data for this paper comes from the third cohort of the programme targeting senior managers delivered between February 2013 and January 2014. This cohort was of particular importance, because, for the first time, this included participants from almost all NHS organisations across the whole region and was notable for both the diversity of roles and backgrounds and for the scale of some of the projects participants brought. This was of notable for the sustainability of the relationships and peer networks formed during the programme, which developed into a genuine CoP.

Our research inquiry was to explore ILP through understanding the construction of an innovation leadership CoP and how it contributes to participants' leadership and innovation practice. Specifically, we asked does the learning from the ILP and the practices developed through the interactions in the ILP contribute to enrolment of organisational actors and to the social acceptance and adoption of innovation in participants' organisations, and if so, how? We adopted an in-depth qualitative inquire to explore this question. From this perspective, and informed by Edwards (2005) learning in CoPs, we wanted to gain a deeper understanding of the processes in ILP, the practices of ILP, what they represented, what participants bring to these practices, how they adapt as they engage in practices, how they are transformed in this process. To understand the practices and the influence of these on the participants we implemented a form of 'insider' ethnography. As tutors of the ILP programmes we observed the participants in as many ILP situations as possible. Our observations were complemented with other forms of data, such as detailed end of programme evaluations of learning and the transfer of leadership learning into participants' leadership practices completed by the participants, materials that participants created in and in-between module sessions, and ad hoc conversations we regularly had with participants during, in-between and after the sessions. We also conducted semi-structured interviews with the participants approximately a year after the completion of the programme to explore the ways in which their learning insights from ILP enabled and positively influenced innovations in their teams. Another key theme of these interviews was the sustainability and spread of their learning from ILP which provided us with rich insights into the changing dynamics of intramural CoPs and the perceived effect of the extramural CoP on that. We also carried out pre- and post-programme evaluations include a combination of close- and open-ended questions with the team members of the participants to provide some insight into the innovation climate in the intramural CoP.

We played a dual role of educators and research and thus we were not separated from the participants' experiences. Reflexivity, then is an important part of working with this dual identity. We gathered and captured data and our 'repertoire of interpretation' (Alvesson & Skoldberg, 2017) in the form of an ethnographic diary. The triangulation of research methods, member checks and prolonged engagement with the participants and their practices were all critical in establishing the validity and reliability of our findings. However, to further resolve any potential 'contamination' we also brought the first author on board who was not a tutor on the programme to take on the role of a peer debriefer.

The analysis of the data was approached inductively to develop insights and inspired by grounded theory (Charmaz, 2006). As such it was an iterative processes and shaped trough the interplay between theory and research material. It is the outcome of this iterative process we not turn our attention to. Due to space constraints, below, we will be telling the story of Jeremy, a services manager in a community health organisation.

## The politics of participative innovation

When Jeremy was promoted to the role of services manager he already had a reputation in the CoP and the wider professional network of practice as someone who acts without trepidation and not easily intimated by challenge and change. This was an important asset, because his role would require him to focus the attention of actors from different professional disciplines with often competing priorities, and to elicit collaboration across those disciplines on agreed, shared goals. To implement a change in approach to the delivery of preventative care services he started by introducing a role and structure review. This led to some people taking redefined roles which required clinical staff, who traditionally were responsible from operational activities, to actively participate in service improvement activities. Jeremy, as the *focal actor* in this actor-network faced the challenge of enlisting other actors' support for participative innovation and mobilise their interest. Importantly, this included his manager, who would require formal reporting and reassurance about the changes, and their congruence with wider organisational goals.

Before restructuring employees identified themselves strongly as clinicians responsible for delivering health care services to the patients. They did not feel any responsibility for and commitment to improving the process for service delivery. In a system where there were both historical rivalry and a practice of siloed working they felt little incentive in collaborating with other services represented within the CoP (or sitting on the boundaries of the CoP) in the service of 'patient-centred care'. In an environment where resource allocation has not kept with increasing demand their primary focus was to keep waiting times within target timeframes. They were not, however, thinking more radically about service innovation. They perceived innovation to services as something that 'higher ups' should be worried about and they as they perceived that as something that requires a business mindset. As such from the outset the interests of the CoP and of Jeremy as the focal actor were not aligned creating the need for a process of *translation*.

The CoP's shared practices revolved around getting things done that might be a by-product of their occupational identity that revolves strongly around 'fixing' things. The restructuring which required them to take on active role in innovation was automatically perceived as a threat to the established professional identities and workplace interactions. The 'do' mindset with its emphasis on action at the expense of reflection that characterised the CoP became a hindrance when the members tried to engage in participative innovation. The CoP, as Jeremy observed, lacked critical reflexivity:

"They needed to be much more openly critical about themselves. So they needed to get more into the nitty gritty of the reflection process. They are set into that operational, do thing. They don't necessarily go back around that cycle, and then go 'well, what we are doing here that was right or wrong?' They flip and skip that step and go straight into the 'just, let's do it!'. So they do, do, do. And they are stuck into doing and reflection and conflict never happens."

This, in the past, led to a series of failed innovation efforts as the CoP did not understand the implications of the wider organisational issues on their actions. Consequently, over time, the CoP started to experience "a reasonable level of anxiety over the failure of ideas and how this may be viewed by the organisation as a whole" (Anonymous Team Member). As a self-defence mechanism the CoP developed an external locus of control blaming externalities, such as work pressures, resource lack, competing priorities and disconnected organisational strategies, for failures. The failures coupled with lack of critical reflexivity that would have allowed the CoP

learning from failures made the whole experience of innovating even more anxiety inducing and threatening. The CoP started to believe that:

"If an idea has to be implemented you have to be certain of its delivery. There is seldom resource to have changes fail." (Anonymous Team Member)

The CoP felt they were being penalised as they perceived that they had "no opportunity to innovate without the fear of not hitting the targets because of time taken to innovate" as one member put it. To avoid failures and risk losing face by developing a reputation as the service which wastes organisation's scarce resources the CoP limited risk-taking. The bureaucratic and hierarchical working climate was conducive to such risk-averse behaviour and made it is for the CoP to defer issues requiring innovation and idea generation to senior leaders in the organisation in more strategic roles.

While Jeremy saw participative innovation necessary for improvement of organisational outcomes the other actors in the CoP perceived Jeremy's solution differently as it did not align well with the temporal rhythms of their works and their interests. CoP members' interests lay in delivering patient care and they measured their outcomes in terms of capacity and efficiency. This created a temporal rhythm of work strongly revolving around appointment slots. The organisational change initiative that Jeremy was proposing clashed not only with how CoP members defined 'good' organisational outcomes but also with this temporal rhythm as it required the members of the CoP to book off certain slots for idea generation and implementation. This made the CoP a very unwelcoming context for the new practices that Jeremy was trying to instil around innovation, creative problem solving and proactive service development. He introduced creative thinking, problem solving and idea generation sessions by taking some slots out from the CoP members daily schedules but in this climate of anxiety focussed on targets, outcomes and capacity Jeremy struggled to create interessment and encourage enrolment. As one CoP member out these sessions turned on to 'winge-fests' and no one seemed too interested on having solutions or coming up with ideas to find a solution. Seven months after the introduction of the participative innovation practices to the intramural CoP, Jeremy started the the ILP programme. It's the dynamics of this extramural CoP which we now turn our attention to.

#### The extramural CoP

Innovation can be a lonely journey, especially in organisational contexts characterised by a blame cultures and high standardisation, formalisation and centralisation which are all found to strangle innovation initiatives. Vanderpyl (2012: 12) vividly tells the story of a Canadian healthcare executive who turnaround an almost bankrupt health centre who "often felt like a lonely sailor in a sea of discontent and aggressiveness". So becoming part of the ILP programme helps to alleviate these feeling with like-minded people. The fact that they are all leading on innovation projects means that they understand and identify with each other's challenges. The identity formation within the ILP as 'fellow sailors' also allows them to talk to each other their challenges, co-reflect on their practices to overcome those challenges and other contentious issues in ways that might be more difficult in other forums within their intramural CoPs.

The middle and senior managers own translation into a member of the extramural CoP involves a construction of the identity as an ILP participant. This is not always experienced as an unproblematic process. Jeremy saw himself as a bit of an outsider on the ILP and initially felt like he did not fit in. Younger and more junior than many, his interests and commitments outside work also set him apart:

"When I started the programme, I beat myself for being the most junior person in the room. And I was; by a number of years. And I was also the most junior person on where I sat in my organisation. I was sitting there with more senior leaders, and you could see that the tools made an impact on these people. For me it was like, 'alright, I'm intimidated by this group of people, the Johns, the Ians who are like on the other end of the spectrum compared to where I am'. But maybe two months into the programme I realised that in terms of application to practice maybe I was in the top tier of the group. And that gave me massive amount of confidence. But it was also all the stuff we did on reflexive thinking and mindfulness that gave me inner peace over the past 12 months. Sounds really stupid but it was the validation of all the other things about me that I haven't thought as valuable, or valuable as when other people were thinking about me that they might not put value on. As time passed, I understood that my style of doing things had as much credence as theirs. And I was like 'oh, this entirely validates my life.'"

The participation in and interactions at the extramural CoP was a reality check for Jeremy helping him appreciate and realise his own assets. This unanticipated source of confidence in turn tipped into to behaviour change at work changing his patterns of participation and interaction in his participation in the intramural CoP. For example, complexity thinking and processual emergence approaches to innovation management is a big theme in the extramural CoP. Participants, through guided reading, discussion and dialogue sessions were encouraged to pay attention to and reflect on patterns of interaction and relationship between the many actors in their organisations and their organising principles, and how they may compete with or reinforce dominant narratives. This, often, highlighted tensions and paradoxes that are experienced as discomforting by the actors involved. In one of the ILP sessions participants, reflecting on Stacey's (2007) work, revealed that while their typical response was to try to eliminate the tension or paradox by moving towards one polarity, this had reduced the scope for experimentation and creativity within their CoPs. The discussions they had over Stacey's (2000) work made them realise that it is the dynamics of "bounded instability" in their organisations that get people demonstrate creative behaviour. They debriefed their role as a senior leader and the implications of complexity thinking for that role and for understanding change for innovation. Through engagement in the extramural CoP they reconstructed a different image of themselves, of their intramural CoPs, of their social worlds to reflect on their situation and explore possibilities. This process of engagement and imagination, described in Wenger's (2000: 227-228) work, made them to rethink and reconfigure their role in 'designing', 'managing', 'leading' innovation as someone who influences events to promote change and innovation rather than someone who designs and controls the blueprint for it. They came to realise that they cannot lead from the front or cannot stand back and change the interactions of people in their intramural CoPs as they are part of that CoP, part of that system as well. Being a surfer, through these discussions at the extramural CoP, Jeremy was able to see how he could improve his practice of managing and influencing the actor-network in his intramural CoP:

"One of the big things that happened [at the extramural CoP] is that I never saw the parallel between the stuff I do outside of work and the stuff I do inside my work. So I never really appreciated that, erm, from my experiences, you know, people considered these things that I do outside of work like the surfing, the climbing, and all the rest of it are childish, silly things that I do that don't necessarily fit with the culture of being a responsible adult. The thing that happened for me was that I actually realised my ability to go with the flow and to engage with those incredibly complex, erm .... you're completely at the whim of whatever you're doing. I'm not in control of the sea, you know, when I go surfing. When I go climbing there's an awful lot of stuff that can go wrong and I'm not in control of the all of the stuff that's happening around me. And for

me the complexity and emergence stuff we discussed [at the ILP] made me realise that I need to use a lot of that sort of thinking when it comes to the way I handle the things that happen around me [at work]. It's more about controlling the ever-flowing energy and harnessing and going with it rather than trying to steer all the time. When I say steer I mean really like pushing kind of against the ocean. You can't do that. That's the thing that I realised when thinking about what I spend my energy and time on at work.... The waves are coming in, you won't be able to stop it, what can you do, you get on it and you glide along it. You take the direction you want to take, but for that you harness the energy to make it work for you. You steer all that is happening around you by picking the channel, the right channel. And I was drawn to that kind of thinking, approach at work."

The extramural CoP was a safer space whereby the participants can own their insecurities. The space allowed the participants gain confidence during the interactions by engaging in the CoP of reflexive thinking and mindfulness. The power relations were configured and experienced differently in the extramural CoP as unlike in the intramural CoP professional identity and reputation was not at stake when trying and failing.

"And, in that environment, you could test the tools and try them out with a group of people. If you read about these out of the book and said 'OK, I'll do it' none of it would have happened. But because we actually had to try it out and do it in real time with a crowd of people who weren't that forgiving if you didn't try – that was useful and gave me confidence to try them with my team in real settings, to walk into them room and tackle the team."

The participants' commitment to the extramural CoP was maintained and effective because they develop a shared history, a set of values and practices and space which provide opportunities for learning and reflection that they ordinarily would not have. Becoming an ILP participant developed their capabilities with respect to leading innovation and facilitated a shift in identity towards that of an innovation leader. The leader Jeremy became was different than the leader he had previously been:

JEREMY: I sort of role model my changes but do it in a quiet way. And that's the stuff I learned from the quiet leadership discussions.

INTERVIEWER: Was that the agency, association, awareness thing that we discussed?

JEREMY: Yeah and also it was the Meyersen book as well, Rocking the Boat. And having those small day to day conversations with people, erm, that didn't tick for a while. Because you know we had lots of conversation on you can't lead people from your office. And I never did that. But I used to not to talk about certain things with people. There were some subjects that in my head were off table.

INTERVIEWER: Because?

JEREMY: Because I perceived them to be possibly, uhm, anxiety-making.

INTERVIEWER: Understood. And then you made the shift to...

JEREMY: I shift to treating people like adults! Most people forget and miss all the time. And when you talk to other leaders as well, they really, 'oh I need to protect them from this, and I need to do this to make them stop feeling like that'. You know what you just need to give them more choices instead of trying to control them and the events in a should, shouldn't mindset.

Jeremy found that when he became more open and shared more the people in his intramural CoP, the other members of the CoP became more open as well. And contrary to his expectation actually their anxiety levels dropped because they knew what was going on more and they could perceive their own actions and events that result from those. This reconfigured the power relations and work interactions in the intramural CoP actor-network making negotiations central to the interessment stage easier in a climate of openness, honesty and trust. In big operational meetings were all one hundred people of the intramural CoP are brought together Jeremy introduced an 'Ask any Question' session to talk about the innovation initiatives, their fit with the strategic priorities, and most importantly their progress and outputs. This did not only improved openness and honesty in the team but also challenge and confrontation, which are critical ingredients for creativity, change and innovation to flourish (Isaksen & Lauer, 2002). Jeremy introduced this practice to the smaller team meetings attended by 7-8 people and bigger service meetings with 70+ attendees to encourage CoP members to challenge him. Once that started to take roots in this open forum format the CoP members learned (and felt prepared) to challenge each other which bred some level of task conflict essential for idea generation in participative innovation. Despite, acknowledging the discomfort he experienced from some of the challenging questions people asked he recognised the spectacular increase in the level of trust.

"That was the result of the debriefing we had on that paper on trust, I can't remember what it was. But I remember thinking 'oh this is just great, why don't we do that?"

These are not the only instances that Jeremy altered the practices of the intramural CoP with his learnings from the extramural CoP. As one of the intramural CoP members noticed he kept coming back from every meeting with the extramural CoP with 'OK-right-we're-gonna-dothis' attitude.

## Reconfiguring the intramural CoP for participative innovation

The identity that Jeremy created as an ILP participant in his participation to the extramural CoP and the practices he 'mastered' through this allowed him to reconfigure the practices of his extramural CoP. He created a "roadmap" as he called it, a programme that he was going to move through using ideas from the extramural CoP to then build for the intramural CoP a programme of change that would influence CoP's capacity to undertake participative innovation practices.

Jeremy started with making sure that his intramural CoP understood the strategic priorities and the wider organisational goals. He successfully managed to *translate* diverging actors' interests around organisational goals and priorities, which heavily revolved around service development innovation. As the members of the intramural CoP now understood what they were doing and why they were doing it, it was easier to achieve *mobilisation* for participative innovation as all actors were now able to follow Jeremey's arguments and supporting evidence. Successful *translation* allowed the CoP to align their efforts with organisational objectives and interests and gave them a sense of direction. The CoP not only developed an awareness of the organisation but also of the broader commissioning climate. This according to Jeremy allowed the CoP to:

"start to generate more clean ideas that could be turned into possible investment opportunities... They knew what was going on."

Previously, the CoP often delivered inaccurate or best guess result second guessing the senior management direction, which led to a series of failed innovation efforts which in turn raised anxiety and fear for taking up more opportunities for innovation.

"I took the strategic vision of the organisation and made it accessible to the team. We started to create themes and objectives for our services that aligned to the strategic needs of the organisation. We used creative problem-solving tools to generate over 300 ideas.

From this, the team reduced these to 10 team objectives, connected with our wider organisational strategy and vision."

In this process, Jeremy used the activities they practiced in the extramural CoP on divergent and convergent thinking and the discussions they had on goal orientation from Rickards' (1974) Problem Solving through Creative Analysis, boundary examination from De Bono's (1982) Lateral Thinking for Management and reflections on their The Kirton Adaption-Innovation Inventory scores developed by Michael Kirton. The ideas and practices Jeremy 'mastered' in the extramural CoP allowed him to confidently sell his argument for participative innovation as the putative solution for the challenges that the team was facing in terms of its reputational challenges and that the organisation is facing in terms of innovation and quality of care. When the intramural CoP saw the evidence for the benefits of participative innovation and the supporting practices Jeremy's argument come to dominate the discourse and, consequently, how actions of the CoP are framed. Participative innovation garnered allies within the intramural CoP who then tied participative innovation practices into their extended networks and mobilised their resources, most important being time, to support it. We see evidence of successful alliance building as over time CoP built trust in its members' and in its collective capabilities generate ideas and create a context for change and innovation. This contributed very positively to team's climate for innovation as evidenced by the results of a diagnostics, Situational Outlook Questionnaire®, that Jeremy's team completed. The CoP recreated its practices with more focus on innovation and idea generation and created new networks within itself where ideas and knowledge and learning can be exchanged. A year later Jeremy's participation to ILP the members of the intramural CoP commented:

"I think the ideas support in this team is great. (Our) team is excellent at working together in creating innovative solutions to solving problems. Creative problem-solving techniques are used early to predict future opportunities and solve existing issues. The level of trust in the team is very high. The team are open-minded, and I feel you are able to voice your thoughts. The members all support one another and are never critical of new ideas, suggestions. Being open and honest with each other helps provide a climate of trust therefore allowing creativity. We are working in a relaxed environment knowing that we have the support from the whole team in achieving the overall aim if we don't agree with each other all the time." (Anonymous Team Member)

"We have the opportunity to discuss new ideas, thoughts, and opinions on new ways of working. Even if new ideas do not bring about change you feel you have had your chance to put over ideas and that they have been considered." (Anonymous Team Member)

The CoP acknowledged that the climate has changed, and the CoP was more mobilised towards making innovation happen:

"The climate in this team has transformed, the team has turned over a number of high-profile projects in the last 12 months. Ideas that have emerged from the team have been much more successful. Early adoption and responsibility for ideas has also tipped the balance here for ideas from being generated to be actioned or implemented. And the profile of the service has risen dramatically. I had some feedback from another member recently who has been working for the department for a considerable length of time. The individual felt that this community at present is the best team they have worked with." (Anonymous Team Member)

Over time the members of the CoP replicated the new practices in their own teams with their own staff. Jeremy likened this to a process of imbedding and positive recruitment where more and more organisational members were pulled in and socialised into the new climate and indoctrinated by the new practices. The CoP became focused on maintaining the new practices by (re)utilizing tools they already used. This suggests that *autonomisation* (or *institutionalization*) in Latour's original framework has been successfully achieved as participative innovation and the supporting practices of creative problem solving, complexity thinking and so on emerged as the appropriate solution to address the challenges that the CoP and the wider organisation was facing. This is evidenced by outcomes that the CoP achieved with the new practices supporting participative innovation. At the time of follow-up interview Jeremy his service won a bid worth of £330,000 that would benefit approximately 4,500 patients. He asserted that his learning from the interactions in the extramural CoP had a strong influence in the innovations by his in intramural CoP, its ability to identify, implement and evaluate opportunities to improve patient care.

#### **Discussion and Conclusion**

The health sector in the UK is facing unprecedented challenge, as highlighted by Carruthers (2011), with a pressing need for the NHS to improve its capacity for innovation to deal with growing demand and shrinking/static budgets. The pressure of 'doing more with less' is becoming stronger with sector spending coming under radical scrutiny and this is a challenge the sector is struggling to meet. Innovation is seen as the most powerful way of reducing costs, of improving efficiency, performance and productivity, and consequently of improving living standards of the society in the long term by improving the health of the population (Keohane, 2018). However, innovation by and large is experienced as a very slow and commonly failed process leading to mixed outcomes. The bureaucratic structure of health care organisations breeding organisational inertia is often seen as the culprit, as well as a culture that breeds risk aversion. Public sector organisations are typically more risk averse than private sector organisations because they have to take into account political judgement, public scrutiny and the perceived quality of service delivery (Bhatta, 2003) which creates a system heavily concerned with accountability, efficiency and productivity. Innovation invariably produces uncertainty, it is associated with 'wicked' problems (Grint, 2005) defying apparent organisational solutions, and requires a longer time frame which is often at cross purposes with a system governed by efficiency and accountability (Potts, 2009).

Finding answers to the wicked problems health sector organisations are experiencing requires a collaborative process (Grint, 2005) a basic ingredient of which is organisational learning, a collective action through which knowledge from the tacit individual level is relocated to the higher tacit firm level (Nonaka, 1994). This was the argument Jeremy was trying to sell to his peers in the intramural CoP. Nevertheless, this is difficult to achieve in health sector organisations for at least two reasons. First, notwithstanding the new paradigms of thinking about public services as 'complex adaptive systems', these organisations are structured around many scattered, usually disconnected decision centres separated by different levels of government (local, regional, national), different services, different policies and programmes, different levels of management (strategic, operational, front-line) which suggests the prevalence of silo thinking rather than whole systems thinking (Benington & Hartley, 2009). Whilst seeking to collaborate in some arenas they are competing for scarce resources and sometimes even competing for service delivery contracts which makes transmitting across sites very difficult, if not threatening for organisation's viability, in the absence of formal mechanisms or informal learning collaboratives (Collins, 2018). Second, we argue the goal of efficiency, rather than effectiveness, inhibits risk-taking and experimentation. It limits

organisational capacity to note and take advantage of unintended consequences of innovation and discourage employee voice, thus jeopardising the outcome, adoption and spread of innovation. Decisions of employees to be silent about the opportunities that innovation offers is a defensive strategy when top management is not supportive and open (Dutton et al., 2001) reducing self-efficacy to make a difference (Van Dyne et al., 2003) and when voice has the risk of isolation (Bowen & Blackmon, 2003) which leads to self-protective behaviour (Van Dyne et al., 2003). Indeed, the emphasis on developing a robust evidence base, providing transparent audit trails, and the culture of blame evidenced by policy initiatives such as 'Getting it Right First Time' (King's Fund, 2017) and directive leadership practices such as mandating adoption of 'proven' good practice and requiring commissioners and providers who perform poorly on innovation to 'explain' their poor performance publicly is not conducive to knowledge sharing and learning from innovation experience to allow scaling outcomes across operational units and organisations.

As a result, health sector managers experience a tension between the rhetoric around innovation, change, systems leadership, whole system thinking and so on and the everyday lived experience of managing innovation and making change to skills, capabilities and outcomes across the whole system. We saw in the story of Jeremy that the intramural CoP that Jeremy was a member of struggled to cope with this tension and found it easier to retreat and to remain oblivious to the benefits that participative innovation could offer to their team and the wider organisation.

Following Jeremy's interactions within the extramural CoP he became a member of by participating to the ILP programme, we illustrated how managers, armed with the benefits from collaborating and sharing ideas on practices on innovation management, can renegotiate the relations in their organisations to achieve mobilisation for and social acceptance of their innovation initiatives. Building on Fox's (2005) work on the role of higher education institutions in translating people into members of a professional community from and ANT lens, we conceptualised learning as a network effect. We showed how learning happens in a network and how its potential is inherent in the network. As the network developed more of the characteristics of a CoP, this increases the potential for the learning to translate into changes in practices. Following Jeremy as he moved between the extramural and intramural CoP we then explored how the extramural CoP escaped silence and found voice in the intramural CoP. The way Jeremy balance (not resolve) the tension he was experiencing in his intramural CoP between risk and accountability, uncertainty and evidence, and innovation and targets was by building relations in his extramural CoP to cope with challenging problems (Wenger and

Snyder, 2000). This not only offered opportunities in terms of learning (Wenger, 2000) but also allowed him to find voice and develop a newly negotiated social identity, reflect on and reveal new aspects of his self-centred identity in addition to reconfiguring his workplace identity.

In particular, our findings shed light on four areas related to this topic. First, we examined the role of established CoPs in organisations in innovation. In line with Hislop (2003), our study shows why CoPs may regard innovations as threats. Using the case study of participative innovation in a community health CoP we revealed how CoP resisted this, mostly in the form of passive resignation rather than deliberate sabotage (Kreitner & Kinicki, 2010), as they believed that it was not worth their time, effort and attention. They resisted participative innovation practices that Jeremy was proposing primarily on ideological grounds (Hambrick & Cannella, 1989). As the CoP had unpleasant memories of innovating, they believed that the proposed change will simply not work, and will cause more damage, in terms of the status and reputation of the CoP than improvement. The practices that participative innovation required were also threatening their established professional identities as clinicians focusing on patient care and social arrangements and workplace interactions at work revolving around seeing and treating patients. and workplace interactions (Burke, 2011).

Secondly, we found out that the innovators could overcome CoP's resistance to innovation by leveraging another CoP and the practices developed there. In our study this CoP was extramural, that innovators they formed with other managers working for different services, at different geographical locations and at different levels and roles. By sharing learning and tinkering and testing the impact of further the proposed innovation and supporting practices, the extramural CoP allowed our research participants to transcend the 'epistemic differences' thus enabling the externalisation of innovation as discussed in Swan et al. (2002). These changes allowed them to share learning and tinker and test the impact of further changes in how services are delivered. Based on the complex responsive processes of relating of Stacey et al. (2000) and extending Buur & Larsen's (2010) discussion on participatory innovation, we argue that this extramural CoP provided the platform for authentic interactions and quality conversations. This allowed for new meanings to emerge and new innovations, adaptations or change to be triggered. New conversations emerged in the mutually improvised relating of managers inhibiting different (yet similar) social worlds with different (yet similar) agendas, intentions, and power dynamics. In this CoP, the quality of the conversation being held drove innovation because everybody could resonate with the emerging concepts, thoughts, opinions,

and as a result they 'kept echoing' (Buur & Larsen, 2010) allowing participants to imagine new identities, new roles, new possibilities for themselves and others.

Third, and related to our second point, the quality of the conversations in the extramural CoP allowed the participants to (re)negotiate their identity not only within in the extramural CoP but within the intramural CoP. Jeremy's negotiation of his shifting status within the extramural CoP, as he was trying the establish the identity of an ILP participant, from an outsider – even an imposter – to a more central, legitimate member of the CoP translated into a more influential engagement within the intramural CoP. The more confidently he was able to engage with the extramural CoP the more he developed his capability to act in ways that were recognised and valued by members of the extramural CoP. As he 'mastered' more and more the practices of the CoP around, for example, like we saw above, complexity thinking and emergence approaches to change and innovation, his legitimacy increased not only within the extramural CoP but in his own eyes as well. He was not only valued and recognised more socially but he started to identify personally more and more with the extramural CoP, which is similar to what Lave and Wenger (1991) observed in the triadic group relations in a range of organisational contexts. Through the practices he 'mastered' in the extramural CoP he developed ability to 'read' the local context in his intramural CoP and to participate in the complex web of interactions between actors with implications for the redefinition of his workplace identity. Echoing Brown & Duguid (2001) we showed how Jeremy not simply *learned about* innovation leadership but also *learned to be* an innovation leader.

Fourth, we revealed how the extramural CoP armed our actors with a range of practices that enabled them to construct and organise new arguments with the aim of mobilising other actors in their intramural CoP and build alliance that were essential for the success of their innovation initiatives. Our analysis and findings show the importance of *the focal actor* – in this case Jeremy who is an ILP participant – in aligning and mobilising the interests of actors in their intramural CoPs by using the shared practices they developed and mastered in the extramural CoP (i.e. the ILP). We have seen that ILP can have a positive impact on successful *interessment* and *enrolment* of actors in organisational actor-networks leading to innovation in practices of the intramural CoPs. We argue that ILP is a network effect, however contrary to its conceptualisation in the extent literature (e.g. Verran, 1999) our analysis suggests that this network effect is not passive. The extramural CoP indirectly became an actor to the intraorganisational CoP changing the state of relations between actor-networks. The values and practices Jeremy mastered in the extramural CoP helped him to redefine the process of

problematisation. Significantly the problem was framed in terms of patient care rather than organisation's innovation challenge per se. He used several tools and practices who was exposed to and practiced in the extramural CoP to secure *interessment* to participative innovation. He used a range of creative thinking and problem-solving sessions supported with new leadership practices informed by complexity thinking and emergence approaches to change management to negotiate with actors in the CoP during the process of *interessment*. Jeremy engaged in *enrolment* primarily through persuasion, inducements and role modelling in order to consolidate the roles, collaborative activities required of the various set of actors in the CoP and the values supportive of these roles and activities. Finally, *mobilisation* can be related to Jeremy's efforts to involve a group of CoP members who were comfortable with participative innovation, thereby slowly building alliances and generating social acceptance to the participative innovation and supporting practices.

The innovation initiatives our research participants are leading, on as is the case with all other health sector managers, are not 'plug-and-play' technologies but complex programmes often cutting across existing professionally, geographically, jurisdictionally demarcated practices. By highlighting the multi-layered and networked nature of interactions leaders of innovation engage in, in their own tension-filled intramural CoPs and more productively in the extramural CoP, our paper shows the importance of ILP bringing together a larger number of different social worlds of managing and leading innovation and in creating new and yet-unknown opportunities for innovation in CoPs. Our findings are, however, are limited to the context of managers participating in an innovation leadership programme. While we believe the findings are relevant to post-experience programmes, we do not seek to generalise and encourage further research in this area.

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