Forthcoming in *Management Learning* (October, 2023). When citing please refer to the published version.

Labours of division: legitimacy, membership, and the performance of business knowledge.

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Abstract

The idea(l) of 'legitimate peripheral participation' remains at the heart of debates over the nature and potential of communities of practice. Yet the question of how the legitimacy or otherwise of participation is actually established is seldom addressed. In this paper we focus on 'legitimacy' as figure instead of ground. We attend to the 'displays of competence', and their associated 'labours of division', by means of which 'practitioners' claim recognition and are made recognisable to each other as members, or non-members, of an 'us'. We seek to understand how members come to recognize particular 'doings' and forms of knowledge as belonging (or not belonging) to a particular practice. How is the common 'domain' (*communis*) of practice settled (or un-settled) in the course of specific performances of membership? Empirically, the paper draws upon a two-year investigation of how community of practice boundaries and participation were negotiated in 'UltraGlass Plc' a multinational manufacturing company, and specifically of the failure of 'community' to cohere around practices.

Keywords: business process; ERP; knowledge; legitimacy; membership; technology

Introduction

Self-described 'knowledge economies' tend to conjure into being ever newer forms of expert labour whilst seeking novel ways of managing them (e.g. Castells, 2006; Castells and Cardoso, 2005; Amin and Roberts 2008). This quest has formed the backdrop for the rise (and decline?) of the idea of "communities of practice". As is well known, the concept emerged out of the work of Lave and Wenger (1991) and Julian Orr (1996) who have highlighted how effective organizational learning often, or perhaps typically, occurs as part and parcel of community participation, rather than as the result of formal instruction and top-down knowledge transmission. "Communities of practice" (CoPs) thus came to describe "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" (Wenger et al 2002:7).

In the context of the so-called "Second Machine Age" (e.g. Brynjolfsson and McAfee, 2014) the 'communities of practice' perspective appeared to offer a welcome corrective to the prevalent techno-centric discourses of Knowledge Management (e.g.

Thomas et al, 2001; Couros, 2003). The task of managing knowledge could be respecified as the "cultivation" of such communities and the fostering of, often informal, interactions necessary for effective knowledge circulation and application (Wenger et al, 2002; Lesser and Storck, 2001). Organizations were urged to incentivize such communities into being rather than merely wait in the hope that they might emerge on their own accord (e.g. McDermott and Archibald, 2010). Thus, in a relatively short space of time, what had been an "analytical viewpoint" (Lave and Wenger, 1991: 40) had become a managerial imperative (e.g. Wenger et al, 2002; see Pattinson et al., 2016). The notion of management as the obvious nurturer of 'community' is, of course, ironic. Ever since Taylor (1911) managerialism has been viewed as symptomatic of a shift from *Gemeinschaft* to *Gesellschaft* (Tönnies, 1887) and thus, ultimately, corrosive of 'community' (e.g. Sennett, 1998). Be that as it may, in the light of ever more vociferous demands that the study of organizations should be(come) an "applied science" (Huxham and Hibbert, 2008; cf Jarzabkowski et al, 2010) - as exemplified for instance by the UK's "research impact" agenda (e.g. BIS, 2009) - the passage of communities of practice from academic concept to corporate project, must rank as a considerable success.

Reflecting on the twists and turns undergone by the notion, Duguid (2008:3) notes that learning, which is "the central focus of the theory has often been ignored...[as] has its central concept: practice. Instead, attention tended to focus on what Raymond Williams called the 'warmly persuasive' concept of community". In Lave and Wenger's (1991:42) original work, it will be recalled, 'community' is a "largely...intuitive notion, [that] requires a more rigorous treatment". Many such treatments have since been forthcoming, indeed far too numerous to adequately explore here. We will therefore stick with what arguably remains the main thread; that represented by the work of Wenger and his co-authors. According to Wenger (1998), the key features that differentiate a CoP from other kinds of groupings are: mutual engagement (practice-related interactions in which shared meanings and orientations towards issues and problems are developed); a joint enterprise (processes of negotiating the role of the collectivity and ways of making members accountable to communal understandings); and a shared repertoire (the discursive resources and artefacts which members utilize in order to negotiate meanings and facilitate learning). These features have, in subsequent work (Wenger et al, 2002; Wenger-Trayner et al, 2014), been re-arranged under a different set of headings: (i) the 'domain'- CoP membership "implies commitment to the domain, and therefore a shared competence that distinguishes members from other people" (Wenger, 2007); the 'community'- what coalesces around "the joint activities and discussions" that facilitate sharing information and mutual learning and (iii) the 'practice'; the emergence of "a shared repertoire of resources" for, and experiences in, "addressing recurring problems" (ibid).

Empirically, what CoPs *do*, has been investigated under a variety of perspectives. In their comprehensive survey of the literature relevant to management and learning, Nicolini et al (2022) identify three such perspectives: CoPs as facilitators of learning and knowledge sharing; CoPs as sources of innovation, and

CoPs as mechanisms for defending interests and maintaining control over domains of practice and expertise. In their own exhaustive review of the literature, Pattinson et al (2016), show that most research is interested in whether CoPs ultimately function as enablers or constraints upon "learning and innovation". According to this research, they tend to enable in specific ways: as facilitators 'of learning and innovation', through the use of 'situated platforms for professional occupations', 'dispersed collaborative configurations', or 'governance structures designed for purpose' (ibid:512). They also stress the need for further investigation of the problems which arise in all these areas, as organizations increasingly come to inhabit what Pattinson et al (2026: 519) call the "accelerating digital world".

In this paper we argue that questions of legitimacy and of participation lie at the heart of such concerns. From our viewpoint then, the features that, according to Wenger, characterise the existence of a CoP also function as grounds on the basis of which claims to legitimacy and of membership may be put forward and granted (or not). Following Garfinkel (1967) 'membership' here refers to the competencies involved in being, and in being perceived as, a member. As Bartel and Dutton (2001:115) note, 'membership is less a matter of being in or out than knowing when and to what degree one is a member'. We are therefore interested in how the legitimacy of participation is (or fails to be) established. Our empirical focus is on the 'displays of competence' that make practitioners recognisable to each other as members of an 'us'. Such recognition, Munro (1996; 1999a) notes, is never a given but is always subject to the judgement of members. The leading questions that this paper addresses therefore are: How, and by what means, do members come to recognize particular 'doings' and forms of knowledge (Gherardi, 2019) as belonging (or not belonging) to a particular practice? How is the common 'domain' (communis) of practice settled (or un-settled) in the course of specific performances of membership?

We set out to explore these questions against the backdrop of the disruptions of established divisions of labour and work identities symptomatic of the deployment of new technological systems (e.g. Zuboff, 1989; Eriksson-Zetterquist et al, 2009) here Enterprise Resource Planning (ERP) systems (e.g. Alvarez, 2008), which we might consider to constitute the mundane machinery of that "accelerating digital world" which Pattinson et al (2016:519) evoke. The paper takes as its starting point the seemingly self-evident distinction between 'the technical' and 'non-technical' "domains" of knowledge and work practice. We explore this relation through by attending to the 'labours of division' (Cooper, 1997; Munro, 1996, 1999a, Hetherington & Munro, 1997) through which these domains are talked and acted into being. Next, we outline how such labours of division feature in "membership work" (Garfinkel, 1967) as a means through which the legitimacy or otherwise of participation is negotiated, affirmed or contested. We then describe the setting (a multinational glass manufacturer) and methods of our investigation. The sections which follow draw upon this research to bring into focus Wenger's defining features of communities of practice, which we find also serve as arenas where on-going

power-political struggles for organizational resources and legitimacy are routinely conducted.

On membership, divisions of labour and their labours of division

According to Wenger there is a negotiation of meanings that takes place to signify the formation of a CoP. Typically, this involves the re-negotiation of occupational and/or professional identities (identities which in turn bleed into broader conceptions of self-identity): "I mean the process through which modes of belonging become constitutive of our identities by creating bonds or distinctions in which we become invested" (Wenger, 1998:191). Recent contributions have urged for more dialogue between Wenger's usage of the concept and studies of 'identity work' in organizational settings (Nicolini et al, 2022:705). Processes of 'identifying as' (Wenger's "participation") and 'identifying with' (Wenger's "reification") have indeed been extensively investigated in the management and organization studies literature (see in particular Alvesson and Willmott, 2002 or the special issues of Organization, 2008; Human Relations, 2009) and, of course, studies focused on management learning (Hay, 2014; Moore and Koning, 2016; Bolander et al., 2019; Corlett et al., 2021). The emphasis in much of this work has tended to be on how members are enrolled or 'hailed' ("interpellated" to use Althusser's [1970] term), in processes of organizational change. The empirical question then becomes whether, and to what extent, workers adopt or resist the identifications and reifications offered to them by those seeking to steer such changes.

Whilst this work has much to recommend it, it often tends to bypass the kind of issues concerning (non-mandated) communities of practice that we want to focus upon here. More specifically, the emphasis on management as identity-mongers detracts attention from the *local* ('shopfloor', if you will) production of differences and distinctions in which members "become invested" (in Wenger's 1998 terminology). As Jenkins (1996) notes, organizational life typically thrives on the production of *internal* symbolic distinctions between members and non-members (cf Hong and O, 2009; Engstrand and Enberg 2020). These distinctions and divisions are so subtle that they are often missed by outsiders. It is, we might say, through the effective performance of such 'labours of division' (Cooper, 1997) that forms of community membership are made *recognize-able* in interaction (Sacks, 1972).

There is now an extensive body of work in organization studies, sociology, and science and technology studies, which details how the introduction of novel technologies brings in its wake changes in the division of labour and (re)distributions of knowledge and skill (e.g. Zuboff, 1989; Noble, 1999; Lamb and Davidson, 2005; Scarbrough, 2008; Orlikowski and Scott, 2008). Barley (1996) for instance, charts the emergence of the figure of 'the technician'- Orr's (1996) original focus - against the backdrop of the increasing colonization of the world of work by complex technical systems. The notion of a 'technician', Barley observes, initiates a number of institutional and occupational boundary disputes: is a technician's work more akin to manual 'blue collar' work or to mental 'professional' labour? Are technicians mere servants of the 'professionals' or are they experts in their own right?

The endemic nature of boundary re-negotiations and disputations such work highlights, draws attention to the politicised nature of the 'labours of division' which underwrite seemingly technologically mandated divisions of labour. The critical issue at here is that with membership of privileged communities of practice comes legitimacy and resources. Hence, we can talk in terms of a politics in relation to these labours of division. On such occasions, as Kirkham and Loft (1993: 508) note, the meaning of the new tasks to be performed 'is derived, in part, from the social meaning of the occupational group to which the people who perform them belong' (our emphasis). In her study of work practices in an US law firm for instance, Suchman (2000) shows how a contest over professional identities was framed by attorneys in terms of distinctions between, on the one hand, 'knowledge work' (their own) and on the other, 'mindless/routine' labour (that of the often female litigation support). Similarly, Strom (1987) and Light (1999) have described how the introduction of calculating machines facilitated the re-classification of office work along gender lines as, for example, the 'professional' labour of managers versus the run-of-mill work of 'clerks' and 'bookkeepers'. A common theme in this work then, is how narrative struggles over occupational identities and the performance of organizational positionings, often unfold around community-specific distinctions and divisions.

Communities of practice, Wenger (1998) notes, can be identified by the methods they use for making members accountable to communal understandings. Such accounts, following Garfinkel (1967), can be understood as accomplishing identity in each occasion of their use. It follows that the *giving and sanctioning of accounts* is central to all performances of membership (Munro, 1999a). Lave and Wenger's (1991) discussion of membership work in an Alcoholics Anonymous group, for instance, shows how the community-specific distinction of a 'non-drinking' from a 'drinking' alcoholic is typically performed by members and would-be members. The work of dis-association (and also re-association since membership of the category 'non-drinking *alcoholic*' is assumed by participants to involve a degree of back-and-forth sliding between the worlds of drinkers and non-drinkers) is typically performed through 'learn(ing) to tell an appropriate story'.

We can pick this particular thread up in the science and technology studies literature which, particularly in its constructionist variants, emphasises 'relevant social group' *membership* as undergirding a particular technology's conditions of meaningfulness (e.g. Bijker, 1997). Whilst much of this work invites us to view technologies *and* social groups alike as enactments of particular patterns of meaning, they often tend to take the latter for granted in their analyses of the former. Janet Low and Steve Woolgar (1993) begin to grapple with such questions in the course of an ethnographic investigation of the nature of the technical 'domain' (in Wenger's 2002 sense) in 'Freshwater', a privatised UK utility. They describe for instance, how Low's request to join the Systems Team (where 'technical' practices are presumably practiced), is subverted by attempts to steer her instead towards the Change Management Team (where 'people issues' are dealt with and, consequently, where a sociologist properly belongs):

'it was felt natural that the (sociologist) observer would want to go with the Change Management Team rather than the Systems Team, since the latter's concern with the actual 'building' of the system involved the application of standard logic which could only be undertaken by specially (technically) trained people' (Low and Woolgar, 1993:41).

Her bid for, albeit 'peripheral' (Lave and Wenger, 1991), participation of the Systems Team was, we might say, not *granted* by members (Goffman, 1959). Lacking the appropriate competencies, they reasoned, a sociologist would be 'out of place' (in Douglas's, 1966 sense) amongst technical practitioners. And yet the 'technical' domain, the ground on which such seemingly commonsensical divisions of labour were routinely performed, appeared itself unstable. Wherever the researchers went, 'technical' practices, the ostensible object of their investigation, always seemed to 'happen' somewhere else. It appeared subject to continual deferral:

'At last. Had the observer finally reached a participant-validated understanding of the technical? No. When (she) reported...(her) interpretation back to William, she was dismayed to be told she had got it wrong. The things she had described...were not technical...Where, then, is the technical? He answered: 'Technical is pissing about on the mainframe. Aah. Hmm. Eh?' (ibid: 42).

Low and Woolgar are thus led to conclude that the term 'technical' does not unproblematically *refer* to *any* pre-given domain or set of practices. At the same time such interpretative flexibility surely cuts both ways. If technical/non-technical and related dualisms and distinctions are to be viewed as 'community performances', as Cooper and Woolgar (1992) urge, then they equally need to be understood as performances of 'community'. What we get a hint of in the Freshwater study, is how performances of 'technical'/'non-technical' domain distinctions, function as methods of assessing claims to knowledge and to the legitimacy of participation. We say 'hint' since an issue not fully explored by Low and Woolgar, is members' personal "investment in" (in Wenger's [1998] sense above), and stance towards, the dualisms and divisions they draw upon in their accounts (Potter and Hepbrun, 2008). A key issue therefore is what is it that members (and would-be-members) *accomplish* by making some kinds of practice recognisable as *technological* work as opposed to some other kind of work?

Garfinkel's (1967:116-85) study of Agnes provides a rather stark, but still relevant illustration. In a social and moral order that, as Garfinkel notes, divides humanity into two - in this case, male and female - the study captures the socially situated work by means of which Agnes, a young transwoman, accomplishes the task "of passing as a 'normal' woman" (Rogers, 1992: 174). Garfinkel's emphasis on the 'methods' of Agnes's femininity, highlights how "persons subtly but continually seek affirmations of membership from each other in all they do and say" (Munro, 2016). The *particular ways* in which participants draw upon (that is reproduce, diverge from, subvert, contest, etc.) taken-for-granted divisions and distinctions in their accounts, enables them to re-present themselves to others (including researchers) in a specific light —as say, female rather than male, or a knowledge worker rather than a paper-pusher. Participants in any given social setting can in principle enact a range

of such identifications. At the same time, claims to membership are, at least potentially, always open to challenge and questioning. Questions of membership argues Munro (1999a:445) are 'seldom fully settled; they usually remain as questions'. In what follows then we set out to explore how particular displays of competence were judged in UltraGlass and how questions of what constitutes legitimate participation were routinely (un)settled.

Setting and Methodology

UltraGlass Plc is a large, multinational glass manufacturer headquartered in the North of England and is one of the sites where we conducted a two-year study between 2003 and 2005 on the role of standardised ICT based applications in organizational knowledge processes: Ultraglass has over the years made significant investment in the "digital world" through the application of enterprise resource planning information systems and software. During the period of study, we had the opportunity to talk to and observe participants in their workplace activities and interactions. We also designed and carried out a series of 44 open-ended semi-structured interviews in total using snowball sampling. 4 individuals were interviewed on two occasions1 and all interviews were carried out in the participants' place of work. 35 of these interviews were carried out with two or more members of the four-member research team present and additional notes were taken to capture the broader social context of the interviews themselvess. We also had on-going discussions with interviewees at meetings and other corporate activities we attended during our two years of engagement on this project. All interviews were recorded, transcribed and circulated to the research team and used as a basis for discussion and assessing the direction of the research at the weekly team meetings. Transcriptions and coding were initially conducted by the first author and then checked by the rest of the research team before establishing an agreed set of categories for further exploration. In this case we focus on 'business' and 'technical knowledge', but we also draw on repeated use made of 'the market' and 'organization' as meaning-making categories and contrasts deployed by members of UltraGlass.

In our interviews and observations we were particularly interested in exploring and analysing how claims to knowledge and expertise were enacted and made visible to us as interviewers and to others in UltraGlass. As a condition of access to UltraGlass we promised to make a report available to the senior management team about the effects of the ERP roll-out. We were thus interested in members' own accounts of their experiences as participants in the production and circulation of knowledge and expertise. 'Accounts' are here understood as 'any intentional communication between two or more people that covertly or through practical analysis reveal features of a setting and serve the pragmatic interests of the participants' (Leiter, 1980:162). At the time of our fieldwork it was assumed that the deployment of ERP systems would affect how "different communities of practice ... align and (re)shape their knowledge(s)" (to quote from our original research proposal). Our original coding of the material reflected this assumption, unwittingly replaying the categorisation of 'information technology' and 'the business' into separate 'domains' of knowledge as relayed to us by participants in their mundane accounts of their workplace practices. However, the

more members described to us issues they faced in the course of their work, the more it became clear that these categories were in fact constitutive of highly-politicised legitimacy claims rather than convenient agreed upon labels for different domains of knowledge. We therefore started to ask *why* and under *what* circumstances technology/business divisions and distinctions were made visible and available, by whom and for what purpose? Specifically, we were interested in the *performance* and the *productivity* of such divisions and distinctions in UltraGlass.

This prompted us to re-code and re-interpret the material and focus on domain/community/practice (the features highlighted by Wenger 2002; Wenger-Trayner et al, 2014) as the grounds on which the legitimacy of participation was affirmed or contested. We have also re-analyzed the material using Wenger's earlier (1998) model (i.e. mutual engagement/joint enterprise/shared repertoire). Despite the fact that participants (as is the case in most CoP studies) did not invoke "community" directly, it soon became clear that they nevertheless routinely described themselves as 'business' practitioners and, by implication, members of an occupational community (Van Maanen and Barley, 1984). However, this wider community ultimately failed to acknowledge them. With this at play we became attentive to the ways in which our own research activities provided argumentative contexts and occasions for participants' enactments of (and reflections on) legitimacy and membership. We, accordingly, came to view membership work as manifested in every 'self-portrait that is being painted' and in the seemingly mundane accounts participants gave of their work practices (Munro, 1996:4). Clearly, such 'self-portraits' ('performances of the self' as Goffman (1959) notes) are never merely that. They are at the same time, snapshots of the social settings that members inhabit. Accordingly, we viewed our interviews and observations not as exercises in information retrieval, but rather as occasions in which 'technology', 'business' - and membership of the one or the other "domain" - were being explored and enacted (Mol, 2002) by members and researchers.

The Competency Centre

In line with industry trends and beginning in 1998, UltraGlass moved away from building its own company specific IT systems to 'buying in' the first of a succession of Enterprise Resource Planning systems supplied by SAP, the leading ERP vendor. Enterprise Resource Planning systems straddle a tension between the ordered promise of a standardised system and local needs and idiosyncrasies. ERP systems come as suites of interconnected modules meant to mirror the functional departments of a contemporary business (Pollock and Williams, 2012). Such templates are commonly based on business models that claim to represent 'industry best practice' for each particular process designed into the system. In 2023, for example, SAP (the leading ERP vendor) provides over thirty 'industry solutions' ranging alphabetically from Aerospace and Defence, through Fashion and Healthcare, to Wholesale Distribution (www.sap.com). Each is sold as an ideal model of organisation represented in the technical design of the system. As Kallinikos (2004) notes, the operation of an ERP system requires that organizational members follow a standardised sequence of steps in order to accomplish any given task. Thus the

SAP/R3 ERP system for instance, one of the earlier ERP best-sellers, specified over a thousand processes, which were assumed to capture most of the activities of a 'normal' organization. ERP templates are usually adopted with as little customization as possible by user organizations in order to avoid future customization costs when upgrading the system.

Echoing Latour's (1991) argument about technology as 'society made durable', we might say that ERP technologies constitute a means through which particular assumptions, values and cultural expectations – for example pertaining to what constitutes good order and organization – are given artefactual form. In Ultraglass, the perceived function of an ERP system was twofold. Firstly, it was hoped that the ERP would facilitate a streamlining of current business processes, enabling the organization to become more integrated, streamlined and competitive. Secondly, the ERP system was also seen as a means of facilitating the reimagining of the business as an integrated and 'global' organization that transcended the now mere local branches of a global corporate form. As a universal application which could be instituted across an organization, the ERP system held the possibility that 'industry best practice' might be operationalised 'globally', with the technology forcing staff to work in a uniform way across the organization (and increasingly across the organization's supply chain). To facilitate the reorganization and streamlining of conventional departments (finance, manufacturing, sales, etc.) in the wake of ERP implementation, Ultraglass also required the institution of a new organizational unit responsible for the roll out of the ERP programme. This new unit was inaugurated as a 'Competency Centre' charged with responsibilities to oversee the introduction and deployment of the technology and facilitate the wider organizational changes that would be needed to make the technology function according to its standard specifications.

As Peter Decker² (the Competency Centre head) argued, the enterprise system was 'completely linked' not only with itself in terms of technical linkages between different modules, but completely embedded within organizational processes: 'SAP is now so integrated to everything the business does, there is actually very little of significance that they can do to the business without having to do something to SAP'. This required not only the standardisation of working practices but, as Peter insisted, that these practices be performed through the use of the ERP package. ERP, and the Competency Centre, would therefore become an obligatory point of passage for all employees in all parts of the organization whenever anything was made, ordered, produced, stored, sold or distributed. Those involved in the implementation of 'the SAP' stressed the need for an ongoing process of adjustment in order to retain consistency in the system. The initial job of the Competency Centre was to deal with teething problems that arose due to the lack of familiarity amongst the users of the system. Its longer-term role, however, was to ensure the successful functioning and management of the company's ERP system. Senior company IT staff were at pains to point out that the Centre was not merely a source of technical support, but also a site through which wider organizational change could be effected via the implementation of technology and in ways that would better serve 'the business'.

The domain

In the version of the Centre's origin story communicated to us by numerous Competency Centre staff, its organizational mission was to *bridge* any business-technology 'gaps'. Thus,

'The (UltraGlass) Board...determined that the SAP was so important that we (the Competency Center) should have people who were <u>experts in all the different fields</u>, so that is how it came about' (Rick, Competency Centre member; our emphasis).

The personal histories narrated by staff working in the Competency Centre frequently connected them directly to the business. In the rest of UltraGlass however, 'the Business' was frequently positioned as 'Other' to 'the SAP'- and thus *outside* the 'technical' expertise of the Competency Centre. In spite of the evident interrelationship between 'technology' and 'business', we came to see that the two domains were invoked by way of a distinction in members' accounts, chiefly in order to highlight the on-going need to perform translations and forge links between them.

To explore this further, we turn to the accounts of the day-to-day work of competency centre staff and to the ways in which the challenges that they faced in the management of the system inflected their reiteration of technology/business classifications and divisions. Competency Centre members were employed in the first instance to respond to calls from users of the system which come through by telephone or email. These calls were then formally entered onto a monitoring system. Requests took three different forms – requests for assistance when the user either didn't know how to use the technology or when the technology failed to function properly; requests for improvements to the IT system; and requests for changes to access authorisation. The legitimacy of the knowledge of Competency Centre staff was dependent on the extent to which they were able to effectively respond to such requests. These relationships of assistance were articulated to us in the first instance as cases of knowledge transfer or translation between the organizational and technical domains. The first kind of requests (questions about how to use the technology) would usually result in the member of the Competency Centre providing an answer to the question based on their own experience or consulting another member of the Competency Centre team for an answer. When users had a problem because the system was (perceived to be) not functioning properly the Competency Centre staff had to decide whether the technical problem lay in the ERP system itself or in some other technology such as the network or the hardware or, alternatively, user error or incompetence. Only once this had been established would Centre staff attempt to resolve the problem.

In terms of the second kind of assistance required (changes to the system) Competency Centre members described themselves as having to translate requests from the vocabulary of the 'business', into a terminology which would make sense in terms of the ERP system. For those working in the Competency Centre working out what the business meant in terms of ERP, or what was needed, was highlighted as an on-going matter of concern. It was not as easy as asking a representative of 'the business' to 'tell us what you want', because in part *what* 'the business' or

representatives of 'the business' *knew to want* depended in part on what the system could provide and what the business knew of the system³. As 'Colin' (on the 'Business') side in UltraGlass complained,

'they (the Competency Centre) say the business does not specify what it needs properly and because of that it causes a lot of trouble.'

This, in turn, called for mastering what Wenger (1998) would term the business "repertoire". The Head of IT (who was in overall charge of the Competency Centre as well), emphasised that she 'encouraged her managers to go to business meetings' in order to keep their knowledge of what was happening in 'the business' current and so ensure that 'Business'-'Technology' translations (in Latour's 1987 sense), were performed smoothly.

When Competency Centre staff talked to us about their work and their responsibilities, the accounts that they gave of their practices were articulated in terms of categorical distinctions which were set up between 'IT' and the 'Business'. For instance, we were introduced to three Centre members who described their work as being,

"...on the technical side of things...working on problems where a piece of functionality or code does not work properly...It is like a technical hub for the entire SAP team." ("Sean")

Interviewer: 'And is this as technical as it gets?'

Sean: 'Well, after us, it is SAP themselves.'

At the same time, they resisted any idea that 'the technical' could ever be practiced in isolation from the 'business'. Instead, their object domain appeared as

'a complex mix, because the people at this end who are the technical bods have to learn more about the business and the people who are down on the business side have to learn to get more and more technical because they are dealing with a computer system.' (Andy, Competency Centre member)

With Centre staff apparently insistent that their work was one of *overcoming* divisions between the technology and business domains, then why was it that the distinction between 'IT' and 'the business' continued to have such purchase in people's accounts of their practices?

At first Technical-Business contrasts and distinctions appeared to be simply descriptive devices through which members could talk about the things they did and the knowledge that they possessed. Why knowledge of *both* the areas of 'IT' and the 'Business' domains was important was explained through descriptions of the purpose of the technology itself and 'its' strategic role within a changing organization. In UltraGlass, as we have seen, this was talked about in terms of the institution of 'global processes'. ERP systems were thus seen to enable the creation of a joined-up global organization with standardised procedures based on notions of 'best practice' which would facilitate the efficient gathering of information about the organization.

As already indicated, most Competency Centre members glossed their contribution to the 'joint enterprise' as *not merely* the provision of technical support to the users of the technology through their knowledge of the IT 'domain', but also crucially- as drawing upon and contributing to knowledge about the functioning of 'the business'. At times, from the perspective of Competency Centre staff, their (claimed) understanding of the business meant that they were not only able to *assist* 'the business side' but were themselves competent practitioners able to make suggestions as to how ideas that the 'business side' had might be improved upon. For example, we were told by 'Joanne' (a senior member of the Competency Centre) that,

'[in] a number of reports we have questioned their ['Business' managers'] logic and that has prompted them to go away and think oh yeah, you're right. Or, I think you've got that wrong.'

In members' narratives, 'being wrong' was not highlighted as a *negative* feature of this relationship. Rather it was presented as feature of a *learning* process (legitimate peripheral participation in CoP terminology) through which they could claim to be gaining a better understanding of the business and enhancing their credentials as active participants in 'the Business': their (ultimately) *common* domain of practice.

Accounts of ERP as the guardian of good business practice meant that staff working in the Competency Centre did not just describe themselves as mere providers of technical support, but *also considered themselves to be advisors on ideal forms of business organization* and custodians of the universality of practices (global processes) within UltraGlass. Competency Centre staff thus spoke of themselves as intimately engaged in debates about the effects of putting in the system (and its various upgrades) not as merely technical tasks but as important contributions to the 'joint enterprise', of turning the company into an effective global organization. This discourse of an 'effective global organization' was one that could be seen to have been variously latched onto, exploited or leveraged for sectional interests that were also being portrayed as a collective interest (IT expertise becoming or joining the community of experts presiding over 'the business'). It was precisely the legitimacy of their self-proclaimed role in negotiating processes of broader organizational change that made the Competency Centre a site where the effects and politics of technology/business divisions were particularly visible.

'Community'?

In Lave and Wenger's (1991) original work, community formation typically takes place in co-located environments where (face-to-face) mutual engagement functions as a key means of (especially tacit) knowledge sharing. Indeed, discussions of 'mutual engagement' in the CoP literature typically assume that spatial proximity is important, or even key (Wenger, 1998). It was significant therefore that competency centre staff were situated in an organizationally and spatially separate department within the headquarter complex, in a large 1960s block that was architecturally striking in its difference from other buildings on the campus. To access their area, a card key was required (restricted to the Competency Centre staff). Here, members

worked in a large open plan office with their desks arranged in groups of four. Early on it was explained to us that these groups referred to the modules that the staff worked on. So, for example, those supporting the finance modules worked in one group and sat next to the group supporting sales and distribution. As we were told, they often had to discuss issues together. The staff who adapted SAP code sat at the far end of the office furthest from the entrance. Other members of the competency centre would apply to them to customise SAP if no other solution to a problem could be found.

In a recent spate of cost-cutting, accommodation at HQ had been rationalised, and staff moved into the tower at the centre of the site. All that is except IT, in which the Competency Centre was included. To their chagrin, the latter had to stay put, since the complex of equipment made it, they were told, 'too expensive' to move. Their claims to be full participants of the 'Business' failed to be materially enacted as they remained spatially situated beyond the margins of the business domain. This symbolic as well as geographical isolation was a major worry and another issue to be overcome in demonstrating the extent of their engagement with the 'Business' (see also Hirst and Humphreys, 2013).

The Competency Centre was itself perceived to be outside any one of the 'businesses' (defined as the revenue-generating units of the organization). Competency Centre staff who supported the day-to-day use of the ERP system were considered 'a supplier of services'. In their recent history they had briefly been called a 'Shared Service Centre', into which the different businesses of the organization would 'buy'. Despite constant reiterations of their continuing engagement with, and centrality to, 'the Business', being a separate department, and being seen to sell services to the "businesses", raised the spectre that the Competency Centre might be misunderstood as an a potentially outsourceable cost or resource. As a resource the type of work they currently performed for UltraGlass could be made available to other companies in order to produce a revenue stream. The technical centre could, in other words, become itself a business and seek additional customers outside the company. Alternatively, Ultraglass could outsource the work of the Competency Centre to other dedicated support companies (cf. Hong and O, 2009). This would be cheaper, some argued, than operating a dedicated support team and full-time employment of 30 members of staff (cf. Kobelsky and Robinson, 2009). As Peter the current Centre head told us:

'My challenge at the moment is that I don't want to become an outsourceable <u>technical</u> ERP team. I want to be a team that is valued <u>as part of the business</u>' (our emphasis).

Indeed, back in 2001, when the Centre was first mooted, Peter had 'successfully fought off' a plan to move the Centre offshore to Prague. The knowledge of the Competency Centre staff and their ability to resolve issues facing the businesses needed to be objectified as 'expertise in the ERP system' in order that it could be 'sold', but it then ran the risk of appearing as a commodity which could be

equally bought in from elsewhere. In order to differentiate the service which they could provide from that of an outside provider, the Competency Centre staff had to do more than simply support a standardised IT system. Rather, they also had to demonstrate their (organizationally specific) knowledge of, and thus the intensity of their engagement with (and inseparability from) the business. The seemingly functional separation of 'IT' from the 'Business' was therefore more than just a question of having knowledge of the one or the other domain. For management, to use the vocabulary popularised by transaction cost theorists (Williamson, 1975), it positioned the work performed by Competency Centre staff on the boundary between 'the organization' and 'the market'. Competency Centre staff thus had to continuously justify their existence as part of the organization (the UltraGlass business) in order to distance the dangers of the market. Defending "from change, control and uncertainty" has been, as Nicolini et al (2022:685; 696-99) show, a longacknowledged function of CoPs. Clearly, Competency Centre staff, not unlike Lave and Wenger's (1991) 'non-drinking alcoholics', had to become adept in 'telling the appropriate stories'. Thus, in another conversation, Peter defended the status of the Competency Centre by reference to its collective *knowledge as a business* asset. If, he argued, 'IT' was allowed to become,

'...too divorced from the business then the gap grows wide enough and they say, well I don't really understand what they are doing, there are costs there that we can't understand [etc.], so let's get somebody else to do it for us, and you see that -you see the whole of the IT organization being outsourced. And it is great [irony] really because there is all that knowledge then goes to somebody else. It takes for ever to sort out all of those mess'. But you can outsource commodity type things and you should outsource those. You should never outsource knowledge.'

The risks and possibilities of dis-engagement, facilitated by re-iterations of divisions between 'business' and 'IT', were routinely relayed in accounts of successful and unsuccessful negotiations over questions of learning, knowledge and expertise. Purely 'technical' knowledge pertaining to a highly standardised technology utilised in many businesses throughout the world, could be seen as portable and therefore amenable to transformation into a market-able commodity. Resistance to such positionings was in turn enacted as the quest for closer forms of mutual engagement, stronger ties and more complex entanglements.

'If I am attached to the customer [the UltraGlass 'business side'] then management, unless ruthless, cannot do anything. Otherwise, I am exposed' (Susan, senior Competency Centre member).

Whilst 'community', was not a term participants used with us, the characteristics that Wenger (e.g. 2002; 1998) sees as evidence of the existence of a CoP nevertheless figured as typical legitimation tropes in accounts of their distinctive 'business' roles. Competence Centre members' narratives thus, echoed Wenger's (1998:251) argument to the effect that communities of practice of whatever form, should ultimately be seen as "organizational assets that represent *investments in mutual engagement*". The value of their expertise, members asserted, was best realised in

their ongoing mutual engagement with their business-side colleagues. The invocation of a knowledge and expertise *specific* to the UltraGlass business, tied their expertise to *this* organization. But neither could they simply sell their labour elsewhere for the same amount as they 'sold' to UltraGlass, for any knowledge gained *about* UltraGlass itself could not be (easily) detached and sold⁴.

Practitioners

For Competency Centre staff, as we have seen, ensuring the inseparability of *their* particular knowledge from the business was part and parcel of their claim to the status of business practitioners. One way in which the *process of learning* was articulated in their accounts to us, was through the importance attributed to their occupational histories. In these ways we can see how knowledge was being acquired and also kept 'active'. Despite the Centre's organizational separation into a discrete unit and its spatial separation into a distinct site, it was of considerable significance to its members that many of them had previously held non-IT related positions in 'the business'. As we have seen, many had previously worked in other divisions of the organization and now worked on supporting the SAP module and it was from this previous experience where they had acquired most of their ('business') knowledge. In their accounts of themselves, many made the point that they were not *really* 'techies' and at least some expressed their own sense of surprise and dislocation that they had ended up working in what might look from the outside like an IT department:

'Though it is an IT department per se, most people have come from the business in this department. We are not true techies. I don't know much about the hardware. I couldn't build a PC' ('John').

'If someone had said I'd be working in IT I'd have laughed, but you fall into these things' ('Harry').

Distinctions between standardised technical expertise and specific business knowledge were central to the ways in which the legitimacy of claims to participation in processes of business change and transformation were being adjudicated. In order to ensure recognition of the active, rather than latent, nature of their 'business knowledge', that is to say, in order that they might be recognised externally to be knowledgeable about the business, competency Centre staff needed something more than simply having had past experience with 'the business'. Rather, what was needed was to demonstrate the effects of this experience in a way that revealed it as the knowledge of active and valued practitioners of the UltraGlass business – and, therefore, have one's expertise recognised as one that is difficult to replace. One way in which this could be demonstrated within their work was through the practice of producing reports from the system about aspects of management and organization that would be of interest to 'the business'.

The point of an ERP system, apart from its promise to unify 'Business' processes, was to capture information about the activities of the organization in a uniform way so that it could be analysed, and on the basis of that data, reliable strategic decisions made. The main way in which management had access to this information was through previously constructed reports. One of the challenges of implementing IT systems like ERP was that managers were then left without the time

or the know-how to interrogate specific data in any detail or to understand the processes behind their production.

'This is the board members type report. They have one presented to them as they don't want to drill down and investigate' (Bill, Competency Centre member)

The senior guys don't know any of this detail. They want more information out of SAP and want to see (for example) why some people are spending more than others, they want a report, but they don't know why the figures say what they say.' (Frank, Competency Centre member)

In member's accounts of these reporting practices, their own roles were highlighted as being much more than that of a mere 'human interface' facilitating managerial interrogation of the data held in the system. Instead they would emphasise their active agency - including mastery of what we might call, after Wenger (1998), the business 'repertoire'. They would stress that it was commonplace for Centre staff to be involved in the designing of new reports, and in doing so, they found themselves having to act not only as 'technical' experts but also having to demonstrate and communicate considerable understanding of the specificities of the 'business'. Responding to such requests required a great deal of negotiation and intermediation between the ERP system and the people who made the request. It was this relational work of 'negotiation' and 'intermediation' that was critical in developing an understanding of the differences and specificities of their 'business knowledge'. Here, knowledge was acquired, so to speak, but also made manifest as part of an ongoing quest for recognition *qua* legitimate business expertise.

Nevertheless, questions of recognition (and thus of membership) commonly remained unsettled. Consider for instance the example of Donald who was viewed by his Competency Centre colleagues as having the strongest claim to expertise in 'the business'. Donald had been working for UltraGlass for many years, starting in his youth as a production assistant in one of the plants, and gradually moving through the organization, into the role of assistant warehouse manager, changing roles periodically until he had become planning and warehouse manager in one of the UK plants. He was in this position when he had been invited to join the development team for the ERP system when it was first set up. After working on its development he moved into the Competency Centre to support the ERP system. More recently, and due to further organizational changes, he had (in his own account) been given a position of greater responsibility as far as his knowledge of 'the business' was concerned; his journey from the periphery to the centre thus appeared complete:

'I am now empowered to get more benefit to develop processes or to see development to benefit the business. I still fix things. But I moved a little bit, to get more on the business side and to talk to the business managers.'

This was a considerable achievement and a source of pride for Donald who enthusiastically described to us the influence he felt he had had over 'the Business', via his work on the SAP.

Donald's claim to expertise appeared uncontested among his colleagues. Although he remained based in the Competency Centre, his job was now categorised by his colleagues and his line-managers as being on 'the business side'. Nevertheless, the value of Donald's expert knowledge of 'the business' appeared to lack recognition outside the Competency Centre itself. Though Donald was acknowledged to be highly expert at interrogating the data within 'the SAP', but his ability to realise the relevance of this data in the eyes of ('proper') business people was questioned. For instance, one of the board members cited Donald's 'repertoire' (Wenger, 1998:125) as characteristic of technical specialists who were *unable* to engage 'properly' with the business;

'if you got Donald Green in here, he never ceases to amaze me telling me where every pack of glass has moved over its life in the stock room for two years, and every little movement is there! Well, so? Very good, thank you Donald, go away and tell me something useful.'

The 'Business' refused, so to speak, to 'pass' Donald's claim to membership, to sanction his account of himself (Goffman, 1959). He in turn, defended his ability to 'tell the right story'- *when properly called* to account- by alluding to the knowledgeability (Garfinkel, 1967) involved in asking the *right* questions:

'Being knowledgeable, [is] know[ing how to] ask a question; the international improvement manager [for example], he asked me if this change would be alright, and I said yes. If I had said no he'd have gone down to more detail.'

Derek Taylor, who worked supporting the plant maintenance module of the ERP system, also told of his own frustration at the lack of recognition of his active role in 'the Business':

'Some people think we do a different job to what we do here. That we tell them what transaction code it is [for example]. I don't think that the level of help and support we give the business in a business sense is appreciated.... Half of my job is what the business <u>should</u> be doing. Monitoring, policing, reporting, noticing problems. Etc.'

The need to demonstrate that they were doing more than an IT support role was a desire for recognition both of their expertise in understanding 'the Business' and furthermore of *their role in shaping it*. Hence, members of the competency centre increased and validated their own knowledge of 'the Business' by interacting with the technologies and relating to one another within the Competency Centre to produce reports that could reveal improved and new information about the organization. However, just as important was the requirement that others would *sanction* these claims to expertise.

Discussion

"The form that the legitimacy of participation takes", argue Lave and Wenger (1991:36) "is a defining characteristic of ways of belonging, and is therefore not only a crucial condition for learning, but a constitutive element of its content". Such an emphasis, however, inevitably poses the question: how exactly is the *legitimacy* of participation is established? On what basis do members come to recognize particular

'doings' and forms of knowledge as belonging to *a* particular practice and thus as a (legitimate) contribution to it? Whilst Lave and Wenger recognise that legitimacy is a "complex notion" entangled "in social structures involving relations of power", its "ambiguous potentialities" (ibid) have, as recent contributions have noted (see Pattinson et al., 2016; Pyrko, 2019, Nicolini et al., 2022) largely remained underexplored. Studies of CoPs, as Hong and O (2009: 312) observe, have often understated the difficulties of 'community' participation. Critics of the CoP concept, or at least of the manner of its deployment in the management literature, have also highlighted the need to attend to the power relations (e.g. Contu and Willmott, 2003; Contu, 2014) and the many-faceted struggles (e.g. Fox, 2000; Engstrand and Enberg, 2020) that characterise the workings of any community.

Questions of legitimacy are of course key to how CoP boundaries are negotiated. Wenger's (1998: 166) distinction between "peripherality" and "marginality" becomes relevant here. While both terms name a distance from a community's presumed core, peripherality and marginality "produce qualitatively different experiences and identities" (ibid). The former is an inclusive and enabling position which provides (would-be) members "with opportunities to make the culture of practice theirs" (Lave and Wenger 1991:95). The latter refers to the displacement of being pushed to the periphery by the power dynamics at work in a given setting (Wenger, 1998:166-7). We have argued that Robert Cooper's (1997) notion of 'labours of division'- as what underpins ostensibly self-evident divisions of labour - can be understood in this light. On their own accounts, Competency Centre staff appeared trapped in an ambivalent state of marginality vis-à-vis a number of the key divisions routinely (re)iterated in corporate activities: technology vs business, market vs organization. For many of them, there seemed to be a split, so to speak, between what they were actually doing and the ways they were located in respect to what should have been their corresponding "community" of practitioners. A split, in other words, between their practice and the membership possibilities associated with that practice. Clearly then, for those working in UltraGlass the categories of 'technology', 'the business', 'market', 'organisation' and so on, were not merely etic terms but *emic* categories which positioned members in community-specific ways. Positionings and dislocations with respect to these "domains" provoked questions and aroused concerns about the legitimacy of different kinds of knowledge and learning. As we have seen, Competency Centre staff constantly (but unsuccessfully) advanced claims to membership (as vital members of 'the business') by means of all the mechanisms through which, Wenger (1998; 2002) claims, communities of practice come to cohere (cf. Nicolini et al, 2022: 684).

One of the motivations which led us to re-analyse the UltraGlass data set, was the ways in which participants' (identity) struggles for legitimacy were, in some ways, reminiscent of broader social disputes triggered by the constitutive effects of takenfor-granted labours of division. As Garfinkel's (1967) Agnes reminds us, and as the ongoing debate over the status of trans men and women in a still (largely) binary

social world underscore, membership often, or perhaps typically, tends to be "partial and provisional" (Munro, 2016). Against this backdrop, the accounts that Competency Centre and Business staff gave of their practices in the course of our research, can be understood as being performative rather than merely referential. Participants, as Goffman (1959; 1963) and Garfinkel (1967) have both shown, "continually seek affirmations of membership" (Munro, 2016) in their routine doings and sayings. Displays of "competence", which "distinguish members from other people" (Wenger, 2007) are thus always subject to the judgement of others who either explicitly, or more often implicitly, 'pass' - or refuse to 'pass' - "each other as a member" (Munro, 2016). In this sense our own research (and its promised report) were inter alia vehicles through which the Centre staff's claims to business expertise could gain currency and legitimacy. Participants invocations of expertise, that is socially recognised knowledge and experience, served to draw and re-draw the contours of 'IT' and the 'Business'. It was more than just a matter of knowing something or not, or of being an expert or not. Instead these invocations or trials of expertise were a means through which claims to membership in a, potentially, precarious work setting were staked and granted (or not). This is then a key feature of the power dynamics (cf Contu and Willmott, 2003; Contu, 2014; Pattinson et al., 2016) that give shape to such settings.

In terms of the still ongoing debate "on the relationship between CoPs and management" (Nicolini et al, 2022: 705), management (in)actions clearly shaped the landscape upon which various forms of peripherality and marginality were enacted and where the legitimacy of participation, and thus of membership, (failed to be) established. Support for "the development and circulation of knowledge within CoPs" and the pursuit of "alignments across communities" should be regarded, argue Pattinson et al. (2016: 519), as "key [management] imperatives" and facilitators of organizational innovation. In Ultraglass however, management appeared in participants' accounts not as the facilitator, that so much of the CoP literature demands (e.g. Wenger et al, 2002; Martin et al, 2004), but largely as an "inhibitor" (Pattinson et al., 2016: 518) to be negotiated round. Whilst 'apprenticelike' learning as participation and identification figured prominently in the Centre's justificatory narratives - as the source of new forms of specific organizational knowledge - such knowledge, and the learning processes which had generated it, were seemingly disqualified by a permanent lack of managerial understanding manifested in, among other things, periodic enthusiasms for more standardised (and thus outsource-able) 'technical' forms of knowledge.

Conclusion

The idea(l) of communities of practice has, by now, more or less completed the inflation-deflation trajectory typically travelled by management concepts, with the domains of knowledge and learning increasingly claimed by new managerial enthusiasms, often under the heading of AI (e.g. Murillo, 2011; Knoco, 2020). Recent

contributions to the CoP literature have sought to assess the true potential of the concept for 21st-Century organizing more dispassionately, as well as the theoretical and empirical work that still remains to be done (see in particular Nicolini et al, 2022; Pattinson et al, 2016). If as Wenger (2005) claims, CoPs should be seen not as a management "fad" (whose time is now passed) but as naming long-established features of social learning and social organization, then the study of 'communities of practice' would benefit, as Gherardi (2009) notes, from a more sustained focus on the 'practices of community'. This is the motivation behind our own decision to revisit the UltraGlass data set and our discussion is meant to extend and supplement such work. In seeking to better understand how communities of practice are, so to speak, practiced, we have in this paper explored how the common ground (communis) of practice (and the legitimacy of processes of participation and identification centred upon this practice -Wenger, 1998) are, or fail to be, accomplished. Our empirical investigation has focused on one such failure in UltraGlass, the apparent failure to cohere around "common" practices. As Nicolini et al (2022: 705-6) note, the CoP literature does not typically deal with failure or how "identification with the community might fail". We have accordingly set out to explore one particularly persistent theme in research participants' accounts of such a failure: the constitutive effects of the categorisation of different 'domains' of practice.

To the extent that legitimate participation entails, and depends upon, particular identificatory possibilities, such a focus allows us, we have intimated, to see the processes through which CoPs (fail to) form as a synecdoche of broader questions concerning practices of community formation characteristic of contemporary societies (cf. Wenger, 2005). "The form that the legitimacy of participation takes", argue Lave and Wenger (1991: 35), "is a defining characteristic of ways of belonging, and is therefore not only a crucial condition for learning, but a constitutive element of its content." In terms of the questions that have guided our research, we have here set out to understand how members come to identify particular 'doings' and forms of knowledge as belonging (or not belonging) to a particular practice (e.g. 'technical' versus 'business') and how the legitimacy of peripheral participation in the one or the other comes to be determined in contemporary corporate settings. As we have seen in UltraGlass the communis of practice remained un-settled, hostage to ongoing, unresolved negotiations over the nature of membership and participation, legitimacy and identity, which sought to define not just the location of the periphery or "community boundaries" (Contu, 2014), but the nature of the *communis* itself. Different, contesting visions were articulated as to where/what this communis was/wasn't: did the work of the Centre fall into "the business" domain as most of its members claimed? Or folded into the IT domain as "business" members maintained? Or was it something altogether different, some-thing that did not properly belong in either and was best outsourced/outsourceable, as management sometimes seemed to think?

The processes of establishing the commonality (or difference) of a practice domain appeared fraught with "power-political" complications. Among UltraGlass's Competency Centre staff, as we have seen, invocations of 'business knowledge' and

associated displays of competence were strategic moves (Crozier and Friedberg, 1980; Munro, 1993) in on-going legitimation contests over the various features said to be indicative of the existence of a 'community' (Wenger, 1998). Global abstractions ('technology', 'business') as re-iterated by members (and would-be members) became interwoven in processes through which participatory possibilities were allocated. By attending to participants struggles for legitimacy over such ostensibly straightforward categorisations, we can start to understand how members are making sense of their jobs, their futures, and their place in wider organizational and marketplace conditions. In an uncertain work environment the mobilisation of technology/business and associated divisions and distinctions functioned *inter alia* as a means of staking (or calling into question) claims to competence and the legitimacy of particular kinds of learning. The failure to establish the *communis* of practice, was, as we have seen, a relationship failure, a failure that happened between the Competency Centre, where such claims originated, and the Business and management 'sides', where their displays of competence were largely judged.

In focusing on 'legitimacy' as figure rather than ground, we sought to show how forms of membership work and their local processes of meaning-making often generate very different definitions of what is, and is not, legitimate peripheral participation and thus learning. Judgements over of legitimacy are therefore central to how questions concerning the communis of practice (and thus of community) are routinely (un)settled.

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Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Economic and Social Research Council (grant\number ESRC RES-334-35-0012).

¹ Second interviews were invited by those interviewees themselves who were keen to elaborate and clarify answers they had given, or to answer subsequent questions that occurred to us as we became increasingly familiar with ERP operations in Ultraglass.

² All names are pseudonyms.

³ Similar findings are reported in O'Doherty's (2017) ethnography of an airport where the construction of airport lounges demanded collaboration across different communities of practice, in his case between 'the business' and the architects or designers of lounges.

⁴ The current interest in transferable skills can be seen as being, *inter alia*, about this problematic of how to make alienable localised experiences so that they can be abstracted in order to be sold in the market.