

COMMUNITIES OF PRACTICE: A NEW CONCEPT FOR THE MILLENNIUM, OR THE REDISCOVERY OF THE WHEEL?¹

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Abstract: ‘Community of practice’ is a relatively new term for an apparently new discovery - groups inside workplaces and elsewhere through which individuals learn a practice, simultaneously developing their own identities, and reproducing the practice. It has been hailed as significant for understanding organizational learning and knowledge management.

This paper explores the meanings of the term and some related concepts through the work of its originators, Lave, and Wenger. This reveals some hidden tensions and conceptual gaps, as well as an implicit four-fold categorization of communities of practice. Two key problems are highlighted. First, it is impossible in the context of organizational studies to distinguish communities of practice from the informal organization, a phenomenon that has been studied for many years. Second, the concept of practice is used in ambiguous and contradictory ways.

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1.0 INTRODUCTION

The term ‘communities of practice’ was introduced by Jean Lave and Etienne Wenger, and first used extensively in their book *Situated learning* (Lave & Wenger 1991; see Lave 1991; Wenger 1998a: xiii). It has been deployed by others from the Xerox PARC / Institute of Learning Research group (e.g. Duguid & Brown 1991, Huberman & Hogg 1994, Brown & Gray 1995) and is seen as a critical novel concept for understanding organizations, particularly in the context of knowledge management (Manville 1998, Peters 1998) and has recently been invoked in papers on organizational learning (Brown & Gray 1995; Brown & Duguid 1998; Fox 1997; Graham et.al. 1998; Gherardi et.al. 1998; Manville & Foote 1996a,b; Richter 1998; Stewart 1996; Wenger 1998b).

The object of this paper is to explore the concept focusing on its conceptual status and potential utility for understanding employing organizations. It should be noted that Lave and Wenger’s “central preoccupation” was with a social theory of learning. They cautioned that the concept of community of practice remained “largely as an intuitive notion” (1991: 42), and concluded that “in a sense, all that we have said so far is about access.” (1991: 101). Nevertheless, they did define the concept, distinguished several types of community, and described examples from which we can derive an understanding of their intentions.

2.0 COMMUNITIES OF PRACTICE

2.1 Definition

A community of practice is “... a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice.” (Lave & Wenger 1991: 98). The notion ‘community’ only implied “participation in an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their communities”, and diversity of participation. It did not imply “some primordial culture sharing entity”, absence of conflict, or of differences of interest. They also added that it was not necessary for members to be co-present, for the group to be well defined and identifiable, or for there to be socially visible boundaries (1991: 98).

Wenger emphasised the defining nature of internal processes. For him communities of practice are characterized by “collective learning [that] results in practices that reflect both the pursuit of [their] enterprises and the attendant social relations.” (Wenger 1998a: 45) They are also “*shared histories of learning*” (Wenger 1998a: 86; italics in original). A community of practice is defined by the “mutual engagement” of the members in a “practice” which “is the source of coherence of a community” and it is through “mutual engagement”, “joint enterprise”, and “a shared repertoire” (Wenger 1998a: 72-3) produced through negotiation and thus defined by the participants as they produce both community and practice that a community of practice can be said to exist (1998a: 78, 84).

2.2 Practice

Lave and Wenger (1991) noted that “a theory of social practice emphasizes the relational interdependency of the agent and world, activity, meaning, cognition, learning, and knowing.” (Lave & Wenger 1991: 50). They linked their work to the legacy of Marx, Bourdieu, and Giddens, among others but did not present a clear conceptual framework for understanding ‘practice’. The term was used interchangeably with “social practice” “activity”, and “an activity system” (Lave & Wenger 1991: 35, 55, 98), but none of these terms was discussed further.

Wenger stated that “practice is always social practice” and “connotes doing ... in a historical and social context that gives structure and meaning to what we do.” (Wenger 1998a: 47). He emphasised meaning rather than doing - “*Practice is about meaning as an experience of everyday life*”. Meaning, moreover, is “located in a process I will call the *negotiation of meaning*”, which involves “*participation and reification*” (Wenger 1998a: 52 - italics in original). Thus communities of practice “develop around things that matter to people ... their practices reflect the member’s own understanding of what is important.” (Wenger 1998b) and a practice should be thought of as what the members of a community of practice “are there to do” (Wenger 1998a: 74).

An understanding of how Lave and Wenger interpreted the concept can be found by examining the examples they discussed. They drew data from five case studies of apprenticeship among Mayan traditional midwives, Liberian tailors, US Navy quartermasters, supermarket butchers’ apprentices, and members of alcoholics anonymous (Lave & Wenger 1991:61-87). They also referred to a study of photocopier field service technicians, (Orr 1990, 1996), and Wenger described staff in a hospital (1996), and the work of insurance claims’ processing clerks (1998a).

The midwives, photocopier technicians, quartermasters, hospital staff, and insurance clerks all perform what can be categorized as service work, in that it enabled others to continue their activities, but did not itself result in production of material goods. The tailors’ practice centred on the production of garments, and the butchers’ of cuts of meat: both are material goods, and so these were instances of material production.

It is more difficult to categorize the practice of members of alcoholics anonymous. This practice transformed and promoted the self-transformation of alcoholics into non-drinking alcoholics through the mediation of other non-drinking alcoholics (Lave & Wenger 1991: 79-84). This can be described as an explicit identity transformation processes - explicit because identity is produced within any community of practice (Lave & Wenger 1991) but here it was itself the focus of the practice. Lave and Wenger also suggested that the practice high school students was to produce “the community of schooled adults” (Lave & Wenger 1991: 99), a process also centred on identity transformation.

In view of the diversity of practice types, it is difficult to see just what a ‘practice’ is (or is not). On the one hand Lave and Wenger appear to mean anything done by people that can be distinguished either by an external observer, or is so distinguished by the people involved. As Wenger (1998a: 47) put it, “The concept of practice

connotes doing ... in a historical and social context that gives structure and meaning to what we do.”

On the other hand, Lave distinguished “practice[s] ... worthy of the name” (Lave 1991:79) from other implicitly ‘unworthy’ practices. The former, it would appear, are to be equated with ‘mastery’ of whatever it is that the community is doing. The latter, on the other hand arise when structural constraints on “informal communities” (Lave 1991: 78) prevent such developments. If what a community of practice *does* is its practice, as Wenger appears to emphasize, it is difficult to envisage how such a practice could be ‘unworthy’. Lave appears implicitly to be setting up some absolute scale against which communities of practice could be ranked, or perhaps suggesting that what a community *wants* to do (but is prevented from doing) is its ‘real’ practice, but she does not make this clear.

2.3 Varieties of community of practice

The term ‘communities of practice’ is qualified in interesting and suggestive ways (Lave & Wenger 1991, Lave 1991; but not in Wenger 1998a). The first notion is that of “interstitial communities of practice” (Lave & Wenger 1991: 42) of which the study of photocopier service technicians was an example (Lave & Wenger 1991: 77, 109). This showed that the technicians’ formal job was to diagnose problems, and repair and maintain machines at customers’ sites (Orr 1990, 1996). They received mandatory training to prepare for work (Orr 1996:156), and were provided with “directive documentation” for their field work (Orr 1996:105-6). Orr, however, discovered that their “real work ... is to maintain a triangular relationship between the technicians, their customers, and the machines ...” (Orr 1996:66), and that the “technician’s primary goal is to keep the customer happy ... [which] includes but is not limited to fixing the machine ... “ (Orr 1996:108).

The technicians also used official resources in ways to suit themselves. The field manuals’ diagnostic routines did not facilitate learning about the machines because managers believed the technicians could be replaced by semiskilled labour with a good set of instructions (Orr 1996:87). The technicians however subverted the purpose of the documentation to learn more about how the machines functioned. This knowledge supplemented that gained from the “community of knowledge” (Orr 1990:174) that they developed, independently of managers, within which they freely shared work knowledge in the form of stories and advice (Orr 1990, 1996, *passim*).

Orr did not refer to the technicians as a community of practice, or use the term ‘interstitial’ although he was part of the same group of researchers as Lave and Wenger (Orr 1996: xiii, xv-xvi). There seem to be two ways in which the technicians’ activities contrasted with those of the other communities of practice Lave and Wenger described.

First, they had redefined their work in ways unintended by managers, and that were “institutionally disapproved” (Lave 1991: 79). Second, they did not follow standard procedures, and even subverted the manuals’ intended purpose. Further, they engaged extensively in story telling that functioned to create and maintain a ‘community of knowledge’ about their work that existed independently of, and in some respects in

spite of, the organization that employed them. Their 'practice', as discovered by Orr, could thus be said to have developed in the 'gaps' or interstices that existed between work as defined, and the range of tasks technicians discovered (or decided) had to be performed if their formal work was to be done effectively. They flouted the rules, in order to get the work done, and were able to do so because of the mismatch between the rules, and the nature of the work itself.

Lave and Wenger argued that "communities of practice may well develop interstitially and informally" (Lave & Wenger 1991: 64, 65), thus appearing to equate these terms. Elsewhere (Lave 1991:78) identifies interstitial with ad hoc communities of practice, and labelled both "informal communities of practice". She contrasted these with communities of practice that "exist ... in formally defined ways." (Lave 1991: 78), but did not provide examples. Indeed, if we accept that communities define themselves, (Wenger 1998a: 74; 1998b), it is difficult to see in what sense they could exist 'formally'. The term 'integral' seems a more descriptive name for non-interstitial communities of practice, indicating that such communities are in some way 'part' of the larger social structure, unlike interstitial ones, without invoking other connotations of formality.

The second distinction Lave and Wenger made was between communities of practice which provided "quite effective forms of learning", and those that 'did not work' (Lave & Wenger 1991: 65). In order to understand this point, we have to consider their concept of 'legitimate peripheral participation'. Unfortunately the term was used in several different ways (e.g. Lave & Wenger 1991: 31, 35, 39-41, 55, 110) and although they insisted that it cannot meaningfully be decomposed, they nevertheless talked about "peripheral participation", about people being "legitimately peripheral", or being able to "participate legitimately, but not peripherally" (Lave & Wenger 1991: 104).

Despite these conceptual ambiguities the thrust of their argument is clear. Legitimate peripheral participation is a socialization process through which newcomers are 'legitimately' associated with a community, initially only in a 'peripheral' manner which nevertheless allows them to 'participate' in real community practice. Thus novice mid-wives accompany experienced ones, run errands for them connected with childbirth, and so on. Newcomers eventually 'move' from periphery to centre, becoming old-timers in the process. This process is essential for learning and the reproduction of the community of practice, and "requires access to a wide range of ongoing activity, old-timers, and other members of the community; and to information, resources, and opportunities for participation" (Lave & Wenger 1991: 100).

Thus a properly functioning community of practice facilitates the legitimate peripheral participation of all its members, and thereby enables learning, and the reproduction of both identities, and practice (Lave & Wenger 1991: 55, 77-9). Opportunities for "full participation" create "possibilities for identities of mastery" through learning (Lave & Wenger 1991: 42, 53, 115). The midwives, tailors, navigators and alcoholics anonymous cases provide examples of effective communities of practice.

A non-functioning community of practice is the mirror image of the former. Possibilities of attaining full participation, and thus 'mastery' are denied or inhibited. The butchers' apprentices were kept on routine jobs, out of all contact with the master

butchers from which they could at least have *seen* what mastery entailed. These apprentices “participate legitimately” (Lave & Wenger 1991: 104) but lacked peripherality. On the other hand, “[s]choolchildren are legitimately peripheral, but kept from participation in the social world more generally (Lave & Wenger 1991:104).

A fourfold typology of communities of practice is clearly implicit in their discussion. First, we have integral communities of practice which are effective in promoting learning: the tailors, navigators, and alcoholics anonymous members. Second are those communities which are also effective, but which are interstitial. The photocopier technicians were a prime example of this type, as were Wenger’s (1998a) insurance clerks, and the midwives (their practices were maintained in the face of prescriptions of best practice by Government officials (Jordan 1989, reported in Brown & Duguid 1991)). The butchers’ apprentices were an integral but ineffective community of practice. No interstitial ineffective communities were described in this literature.

Lave & Wenger (1991) and Lave (1991) also indicated some of the conditions under which legitimate peripheral participation might be ‘distorted’, and thus functioning integral communities of practice could fail to develop. The factors they identified can be divided into two groups - those external to and those internal to the community of practice, although there may be some overlap in their effects.

Factors external to the community of practice included “coercive workplaces” (Lave & Wenger 1991:64); where the “exchange of labor for opportunities to become part of a community of mature practice” occurred, or where there was “commoditization of labor” (Lave & Wenger 1991:76; Lave 1991: 65). Interstitial communities of practice developed under such conditions “through resistance to the prescriptions of the ostensibly primary organizational form.” (Lave & Wenger 1991: 64). They felt these “structural constraints ... may curtail or extinguish apprentices’ access to the full range of activities of the job ...” (Lave & Wenger 1991:85-6), and that under such conditions only the “sociocultural practice of whatever informal community takes place in response to coercion” would be learned (Lave & Wenger 1991: 64, 42). “[L]egitimate access to ... a practice ... worthy of the name” (Lave 1991: 78-9) would be rare for interstitial communities. In effect Lave argued that integral/successful communities of practice could not exist under capitalist relations of production. There, “negative identities and misrecognized or institutionally disapproved interstitial communities of practice.” (Lave 1991: 79) would emerge.

The process of legitimate peripheral participation could also be distorted independently by factors internal to the community of practice. Thus where old-timers ‘haze’ newcomers (Lave & Wenger 1991: 76), or “masters prevent learning by acting ... as pedagogical authoritarians ...” rather than facilitating newcomers’ learning (Lave & Wenger 1991:76) learning does not occur. Similar problems arise, implicitly, where there are adversarial relations with “masters, bosses, or managers; exhausting overinvolvement in work; or in involuntary servitude” since the prospects for and nature of participation are constrained under such circumstances (Lave & Wenger 1991:64).

3.0 DISCUSSION

3.1 The 'discovery' of informal workplace groups

There seems to be a consensus that Lave, Wenger and Orr have drawn attention to a novel aspect of work and working. Thus Brown & Duguid (1991) contrast communities of practice with group theory, represented by Hackman (1990) and conclude "Group theory in general focuses on groups as canonical, bounded entities that lie within an organization and that are organized or at least sanctioned by that organization and its view of tasks" (Brown & Duguid 1991). Communities of practice, by comparison, are non-canonical, and not recognized by the organization.

The concept of a community of practice has also been held to provide a new conceptual tool for enabling the study of "occupational dynamics in situations that lack the institutional supports that sociologists normally attribute to recognizable occupations." (Barley 1996). Nelsen contrasts communities of practice with occupations, asserting that "communities of practice span occupational ... boundaries to include a variety of actors - providing they share the same worldview.", and claims that an emergency medical team comprising medical technicians, firefighters, rescue workers, police, physicians, nurses and so on constitutes a community of practice (Nelsen 1997: 155).

Wenger asserts that a community of practice is "not a synonym for group, team, or network." (1998a: 74). He sees membership of groups as "a matter of affiliation" in which "identity is a matter of social categories", but provides neither authority, argument nor evidence to support his conclusion. In communities of practice, however, he claims that "Membership ... is a matter of participation and learning, and identity involves ways of relating to the world." (Wenger 1998a: 283). Further, networks "merely [define] who knows whom" (1998a: 74). Thus in an organizational context, communities of practice are distinct from business or functional units in that they define themselves in practice; from teams because these are defined by the task; and from networks which are "just a set of relationships" (Wenger 1998b). His case for the phenomenological distinctiveness of 'communities of practice' is asserted rather than argued.

None of these authors appear to be aware of the extensive if diverse and dispersed research on informal groups in organizations, with the partial exception of Orr (1996: 151-2). This omission is surprising as some of the Xerox PARC researchers did equate communities of practice with informal organizational groups (Huberman & Hogg, 1994). Savoie (1993) reminds us that the distinction between *de jure* and *de facto* dates back to Roman times, and more recently the phenomenon was described as so commonplace in organizational studies that documentation hardly seemed necessary (Zimmerman 1971). This is not the place to begin a new review of this work (see e.g. Hodson 1997, Rose 1988, Savoie 1993, Salaman, 1986) but reminder of its scope is pertinent.

We can begin with a report of consultation and collaboration among colleagues in a US Government audit department originally reported by Blau in 1955 (Blau 1974). Formally, the auditors worked independently of each other, and were supposed to consult their supervisor if they had problems; they were expressly prohibited from

consulting each other. Nevertheless, Blau discovered that agents habitually consulted a small number of relatively experienced colleagues either directly, or through lunch-break story telling. Blau concluded:

The practice of consulting co-workers, directly or in disguised form, ... transformed an aggregate of individuals who happened to have the same supervisor into a cohesive group. The recurrent experience of being dependent on the group, whose members furnished needed help, and of being appreciated by the others in the group, ... , created strong mutual bonds. ... Social cohesion, in turn, contributed to operations in a variety of ways. (Blau 1974: 166-7)

We can also refer in this context to Trist and Bamforth's (1951) discovery of the "responsible autonomy" exercised by self-organizing teams of coal miners, and Strauss et.al.'s (1963) identification of 'negotiated order' as the means by which concerted action is obtained and maintained between individuals and groups in an organization.

Groups also manage work life in ways to suit themselves as Wenger (1998a) noted of the insurance claims' processors. Burawoy (1979), Roy (1952, 1953), and Roethlisberger and Dickson (1939) provide classic accounts of 'making out' under piecework payment systems. Here, workers' ingenuity is often exercised to obtain the maximum pay for minimum effort. This is generally done in a collective manner, with understandings over acceptable levels of effort established and maintained by the group. Thus workers establish and maintain maximum levels of work turned in during any time period; work hard on easy jobs to build up a 'bank' of effort credit to be called on when faced with jobs on which it was impossible to 'make out' - achieve a reasonable level of output or earnings; apply their skill to devising and deploying methods of achieving acceptable output using methods not officially recognized (but which give them some advantage), and so on.

Making out can be treated as a game (Burawoy 1979), but industrial workers also literally play games, filling out 'spaces' in work time that were not or could not be prescribed (Katz 1968). At the Hawthorne plant, observers noted a number of different games that the men engaged in during work breaks or production interruptions. As is well known, they identified two separate groups of players, involving different grades of worker, in the same small unit (Roethlisberger & Dickson 1939:500-501). Roy (1960) also described a variety of games and non-work related storytelling among a small group of factory workers.

Games can also merge into 'sabotage' (Brown 1977), which itself has degrees of significance for worker and manager. As a vacation cleaner in a light engineering factory, one 'game' I observed involved running machines too fast so that large quantities of oil would flood out of the reservoirs onto the floor. This produced a period of respite from the monotony of machine minding while the cleaners scurried around (but not too fast) making the floor safe again.

Games can be seen as functional but they are quite distinct from the behaviour of groups like the audit agents, photocopier technicians, or those engaged in 'making out', since the activities were explicitly non-work directed. Autonomous group centred behaviour or practices at work extend even further in what can be seen as the direction of stealing / reclaiming time from the employer. Batstone et.al. in *Shop*

Stewards in Action (1977) provide a detailed portrait of shop floor union organizing activity showing how issues regarded as important to their members were raised, assessed, and evaluated, and how activists manage relations among themselves, and with their members. All this self-managed activity was, like that of Lave and Wenger's alcoholics anonymous members, *for* themselves, and clearly conducted in the 'interstices' (some officially recognized) of the formal organization to which they 'belonged'.

Even further removed (from a managerial perspective) along this scale is workplace theft. Mars (1982) described how workers in various jobs engaged in group devised and sanctioned methods of 'fiddling'. These groups operated in ways identical to those described by Orr (1996) or Blau (1964), but worked for themselves, not 'for' the employing organization. Outright sabotage is of course even further removed along this scale, but is also socially ordered, as numerous studies of working class development have shown (e.g. Brown, 1977, Thompson, 1968).

Before considering the implications of these cases, are they 'communities of practice' in the sense intended by Lave, Wenger, and other authors? Blau's auditors clearly formed an interstitial community of practice comparable with the photocopier technicians, but what of the other examples? Whether they are real 'communities of practice' might depend on what is meant by 'practice' - an issue discussed in the next section. On the assumption that a practice is what the people doing it do (Wenger 1998a: 74, 1998b) then colleagues co-operating to bend the rules in order to get work done, to manage the work-effort bargain to their advantage, to play games, organize to identify and promote their own interests at work, or to engage in community sanctioned acts of sabotage, all form 'communities of practice'.

From this perspective, it is clear that 'communities of practice' have been known about and studied for many years. Their presence is implicit in Taylor's contrast of scientific management with what it was intended to replace (Taylor 1911, 1947). In 19th Century Britain, if not elsewhere in Europe, the term "co-operative work" was used to describe work performed by autonomous work groups (Schloss, 1898). The history of employee self-organization is of course also well known and studied.

In the context of organizational theory and behaviour, and studies of work, 'communities of practice' are known better as informal groups, or the informal organization, or through the notion of industrial sub-culture or organizational culture (Gray & Starke, 1988; Buchanan & Huczynski, 1985; Turner 1971). While some of the 'community of practice' literature emphasises aspects of informal group functioning that have previously gone unremarked, there seems no advantage in inventing a new term to describe a familiar if neglected aspect of organizational life.

It is also evident from this brief review that informal groups' activities cover a far wider spectrum than noted by 'community of practice' authors. Despite their concern to provide a situated, historical, account of learning Lave & Wenger only focus on one of the many practices (in particular on 'work') that engaged members of their communities of practice. A truly situated account of their practice would require us to take other practices into account.

3.2 The notion of ‘practice’

There are two issues arising in connection with how ‘practice’ was applied by ‘communities of practice’ authors. The first concerns the identification of ‘practice’ with ‘work’, and the second the distinction between ‘worthy’ and other practices.

Four of Lave & Wenger’s (1991) communities of practice performed tasks valued by others outside the community - midwifery, garment manufacture, navigation, and meat preparation. So did Wenger’s (1998a) insurance claims clerks, the photocopier technicians (Orr 1996), engineers at National Semiconductor (Brown & Gray, 1995), medical practitioners and other staff (Wenger 1996), and emergency medical teams (Nelsen 1997). A case could also be made for regarding alcoholics anonymous members as producing a socially valued service but they are also distinct in that their practice explicitly concerns self-transformation. For the other groups, such transformations only happen as a by-product of practices that produce social values.

If a practice necessarily involves the production of social values then the term could be reserved for such groupings, and those examples of practice centred more ‘narrowly’ on group values excluded from consideration. To do so, however, would lead to debate about whose values should be taken as the standard, and preclude us from accepting a community’s own definition of its practice. If, however, this latter perspective is accepted, then ‘making out’, playing games, shop steward and union activities, and ‘fiddling’ must be regarded as valid practices. (They certainly provide instances of participatory learning, of transition from periphery to ‘centre’, of identity formation, of special language and behaviours, as all the references cited above show). The term ‘community of practice’ must therefore include such groupings. We are then back to the position that there is little or nothing to distinguish a ‘community of practice’ from an informal group, at least in the context of employing organizations.

The second issue also concerns values, this time for or of the community itself. As we have seen, Lave (1991:78-9) asserted that ‘interstitial’ communities of practice rarely get access to ‘worthy’ practices, defined implicitly in terms of ‘mastery’, and by contrast with the examples of the midwives, tailors, navigators, and alcoholics anonymous members. The practices to which novice midwives and tailors can aspire to grow into are clearly akin to craft work and skill, and this appears to be what Lave in particular means by ‘worthy practice’, at least in a work context (see especially Lave 1991).

The Navy navigators were also included in Lave and Wenger’s list of integral communities of practice, but it is unclear how can we think of them as engaged in a ‘worthy practice’ since they only contributed a small part, and one defined by designers of naval work, in the running of the ship. Conversely, why is the photocopier technicians’ practice not ‘worthy’; and what might constitute a worthy practice for them, or for anyone working where there is a marked division of labour?

It seems that the distinction between ‘worthy’ practices, and those that only belong to the informal community itself is based on external (observer) values. The imposition of particular values in this way might be justified from the perspective of a humanistic concern with learning (Lave 1991). In the context of work, her concern is reminiscent of early discussion about the nature of skill in the labour process debate (e.g.

Braverman 1974), or the concerns of job enrichment proponents (Buchanan & Huczynski 1985). But making value judgements about a practice does not help in the identification and analysis of communities of practice.

If the concept of 'practice' is to be used, and it is to mean something more than just 'what people do', then it seems preferable to identify practices in terms of what an informal group actually does, rather than make difficult and perhaps indefensible distinctions between 'worthy' and other practices. Further, the concept appears to require more substantive theoretical definition or at least explication than Lave or Wenger provided. Perhaps the work of Harris (1980; and see Reed 1985) would be relevant here.

4.0 BY WAY OF A CONCLUSION

Space precludes discussion of other problematic issues such as the conflation of learning with living; claims about identity formation in groups and organizations; the failure to 'situate' 'communities of practice' in their larger context; the distinctiveness of 'legitimate peripheral participation' in the context of organizational socialization theories; and, the issue of special workplace language.

The concept of 'communities of practice' lacks conceptual clarity, and does not add to knowledge about organizational functioning. Its use is likely to lead us to believe it is a new discovery, and to ignore the wealth of knowledge we have on informal and autonomous work groups in organizations, and work group psychology. In much of the 'communities of practice' literature we appear simply to be dealing with a rediscovery of 'human factors', and of many established if neglected ideas that do appear to be very relevant to organizational learning, and knowledge management.

REFERENCES

- Barley, S. (1996) *Foreword*, in Orr (1996)
- Batstone, E., Boraston, I., & Frenkel, S. (1977) *Shop stewards in action*. Oxford: Blackwell
- Blau, P. M. (1974) *On the nature of organizations*, New York: John Wiley
- Braverman, H. (1974) *Labor and monopoly capital*. New York: Monthly Review Press
- Brown, G. A. (1977) *Sabotage: a study in industrial conflict*, Nottingham: Spokesman
- Brown, J. S. & Duguid, P. (1991) "Organizational learning and communities-of-practice: towards a unified view of working, learning, and innovation", *Organization science*, 2 (1), 40-57
- Brown J. S. & Duguid, P. (1998) "Organizing knowledge", *California Management Review*, 40 (3), 90-111
- Brown J.S. & Gray, E.S. (1995) "The people are the company", *FastCompany*, 1, 78-
- Buchanan, D. A. & Huczynski, A. (1985) *Organizational behaviour*, Englewood Cliffs: Prentice Hall
- Burawoy, M. (1979) *Manufacturing consent*, Chicago: University of Chicago Press

- Fox, S. (1997) "From management education and development to the study of management learning", Chapter 1 in Burgoyne J. & Reynolds, M. (eds.), *Management learning*. London: Sage
- Gherardi, S. Nicolini, D. & Odella, F. (1998) "Toward a social understanding of how people learn in organizations", *Management Learning*, 29 (3), 273-97
- Graham, W. Osgood, D. & Karren, J. (1998) "A real-life community of practice", *Training & Development*, 52 (5), 34-38
- Gray, J. L. & Starke, F. A. *Organizational behavior: concepts and applications*, (4th edition), Columbus: Merrill Publishing
- Hackman, J. R. (ed.) (1990) *Groups that work (and those that don't)*, San Francisco: Jossey-Bass
- Harris, C. C. (1980) *Fundamental concepts and the sociological enterprise*, London: Allen & Unwin
- Hodson, R. (1997) "Group relations at work", *Work and occupations*, 24 (4), 426-452
- Huberman, B.A. & Hogg, T. (1994) *Communities of practice: performance and evolution*, Dynamics of Computation Group, Xerox Palo Alto Research Center, October 1994
- Hutchins, E. (1996) "Learning to navigate", Chapter 2, in Chaiklin, S. and Lave, J. *Understanding practice: perspectives on activity and context*, Cambridge: Cambridge University Press
- Jordan, B. (1989) "Cosmopolitan obstetrics: some insights into the training of traditional midwives", *Social Science and Medicine*, 28, (9), 925-944
- Katz, F. E. (1968) *Autonomy and organization: the limits of social control*, New York: Random House, Chapter 2, in Salaman & Thompson (1973), chapter 12
- Lave, J. (1991) "Situated learning in communities of practice", Chapter 4 in Resnick, L. B. Levine, J. M. & Teasley, S. D. (eds.), *Perspectives on socially shared cognition*, Washington: American Psychological Association, 63-84
- Lave J. & Wenger, E. (1991) *Situated learning. Legitimate peripheral participation*, Cambridge: Cambridge University Press
- Manville, B. & Foote, N. (1996a) "Strategy as if knowledge mattered", *FastCompany*, April/May, 66-
- Manville, B. & Foote, N. (1996b) "Harvest your workers' knowledge", *Datamation*, July
- Manville, P. B. (1998) Quote on Wenger 1998a back dustcover
- Mars, G. (1982) *Cheats at work. An anthropology of workplace crime*, London & Boston: Unwin Paperbacks
- Nelsen, B. J. (1997) "Work as a moral act: how emergency medical technicians understand their work", Chapter 7 in Barley, S. R. & Orr, J. E. *Between craft and science*. Ithaca & London: Cornell University Press
- Orr, J.E. (1990) "Sharing knowledge, celebrating identity: community memory in a service culture", Chapter 9 in Middleton, R. & Edwards, D. (eds.), *Collective remembering*, London: Sage
- Orr, J.E. (1996) *Talking about machines. An ethnography of a modern job*. Ithaca & London: ILR Press, Cornell
- Peters, T. (1998) Quote on Wenger 1998a back dustcover
- Reed, M. (1985) *Redirections in organizational analysis*, London & New York: Tavistock Publications
- Richter, I. (1998) "Individual and organizational learning at the executive level", *Management Learning*, 29 (3), 299-346

- Roethlisberger, F.J. & Dickson, W.J. (1939) *Management and the worker*, Cambridge Mass.: Harvard University Press
- Rose, M. (1988) *Industrial behaviour: research and control*, 2nd edition, Harmondsworth: Penguin
- Roy, D. (1952) "Efficiency and the fix: informal intergroup relations in a piece work machine shop", *American Journal of Sociology*, 60, 255-66
- Roy, D. (1953) "Work satisfaction and social reward in quota achievement", *American Sociological Review*, 18, 507-14
- Roy, D. (1960) "Banana time: job satisfaction and informal interaction", *Human Organization*, 18, 156-68, in Salaman & Thompson, (1973), chapter 13
- Salaman, G. (1986) *Working*, Chichester: Ellis Horwood & Tavistock Publications
- Salaman, G. & Thompson, K. (1973) *People and organizations*, London: Longman / Open University Press
- Savoie, A. (1993) "Les groups informal dans les organisations: cadre general d'analyse", *Canadian Psychology/Psychologie canadienne*, 34 (1), 79-97
- Schloss, D. F. (1898) *Methods of industrial remuneration*, 3rd edition, London: Williams & Norgate
- Stewart, T. A. (1996) "The invisible keys to success", *Fortune*, August 5
- Strauss, A., Schatzman, L., Ehrlich, D., Bucher, R., & Shabshin, M. 1963, "The hospital and its negotiated order", in Friedson, E., (ed.) *The hospital in modern society*, London: Macmillan
- Taylor, F. W. (1911) (1947) *The principles of scientific management*, New York: Harper & Row
- Thompson, E. P. (1968) *The making of the English working class*, Harmondsworth: Penguin
- Trist, E. & Bamforth, K. W. (1951) "Some social and psychological consequences of the longwall method of coal-getting". *Human Relations*, 4 (1)
- Turner, B. A. (1971) *Exploring the industrial subculture*, London: Macmillan, in Salaman & Thompson, 1973, chapter 4
- Wenger, E. (1996) "Communities of practice. The social fabric of a learning organization", *Healthcare Forum Journal*, 39 (4), 20-
- Wenger, E. (1998a) *Communities of practice. Learning, meaning and identity*, Cambridge: Cambridge University Press
- Wenger, E. (1998b), "Communities of practice learning as a social system", *Systems Thinker*, June
- Zimmerman, D. (1971) "The practicalities of rule use", in Douglas, J. (ed.), *Understanding everyday life*, London: RKP, in Salaman & Thompson, (1973), chapter 16