CHAPTER 4

SITUATING LEARNING IN COMMUNITIES OF PRACTICE

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INTRODUCTION

What would happen if a different eye, culturally and historically sensitized by an excursion through forms of apprenticeship in different parts of the world, were turned on specific contemporary cultural and historical features of learning processes as these are situated in communities of practice in the United States? Rather than turning to school-like activities for confirmation and guidance about the nature of learning, that gaze would reverse the perspective from which anthropologists look outward from their culture onto another. It would draw on what is known about learning in forms of apprenticeship in other cultures to consider learning in our own sociocultural, historically grounded world. Such a view invites a rethinking of the notion of learning, treating it as an emerging property of whole persons' legitimate peripheral participation in communities of practice. Such a view sees mind, culture, history, and the social world as interrelated processes that constitute each other, and intentionally

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Etienne Wenger and I developed this conception of learning in collaborative work. Learning as legitimate peripheral participation is described in detail in Lave and Wenger, 1991. Much of the argument of the present chapter has its roots in this collaboration.

blurs social scientists' divisions among component parts of persons, their activities, and the world. These strategies of inquiry—counterintuitive definitions of *learning*, reversed points of cultural view, and historical analysis of cognitive processes—are ways to move closer to an encompassing theory of persons-learning while exploring the implications of a more general theory of socially situated activity.

This attempt to rethink learning in social, cultural, and historical terms has developed in response to many of the same issues that have led to discussions of socially shared cognition in this volume. At the same time, I take issue with some work characterized in this way, for it either maintains overly simple boundaries between the individual (and thus the "cognitive") and some version of a world "out there," or turns to a radical constructivist view in which the world is (only) subjectively or intersubjectively constructed. Learning, it seems to me, is neither wholly subjective nor fully encompassed in social interaction, and it is not constituted separately from the social world (with its own structures and meanings) of which it is part. This recommends a decentered view of the locus and meaning of learning, in which learning is recognized as a social phenomenon constituted in the experienced, lived-in world, through legitimate peripheral participation in ongoing social practice; the process of changing knowledgeable skill is subsumed in processes of changing identity in and through membership in a community of practitioners; and mastery is an organizational, relational characteristic of communities of practice.

Anthropological studies of apprenticeship offer possible alternative cultural points of view on social processes of learning and inspiration for counterintuitive conceptualizations of such processes. Craft apprenticeship in West Africa and apprenticeship among Yucatec Mayan midwives, for example, are practices in which mastery comes about without didactic structuring and in such a fashion that knowledgeable skill is part of the construction of new identities of mastery in practice. Inquiring into the nature of such processes leads to questions about the sociocultural character of social re-production for both persons and communities of practice in contemporary American society. What are typical communities of practice? What and how do people learn as legitimate peripheral participants, and how is this arranged in the socially organized settings of everyday practice? What can we learn from examining contemporary social practice when it is conceived as a complex structure of interrelated processes of production and transformation of communities and participants?

Several peculiarities have emerged rather quickly in the pursuit of answers to these questions. There are highly valued forms of knowledgeable skill in this society for which learning is structured in apprentice-like forms. Furthermore, once one begins to think in terms of legitimate peripheral participation in communities of practice, many other forms of socially organized activity

become salient as sites of learning (e.g., Alcoholics Anonymous, one of the examples in the discussion that follows). But if one turns to formal, explicit, salient educational sites (schooling being the primary one, but the workplace being characterized in similarly urgent terms), it is difficult to identify communities of practice, widespread mastery, and traditions of centripetal participation leading to changing identities of mastery. This is, of course, too broad a generalization to stand on its own. The point here is to sketch how a socially situated theory of learning reveals the problematic character of the social—institutional arrangements of schools and workplaces that are intended to bring about learning in the world in which we live.

Why is learning problematic in the modern world? One possible response to this question is suggested in the historical analysis of Marxist social theory concerning the alienated condition of contemporary life. In this late period of capitalism, widespread deep knowledgeability appears to be in short supply, especially in those settings that make the most self-conscious and vociferous demands for complex knowledgeable skill. Learning identities (in both senses) are embroiled in pervasive processes of commoditization. To commoditize labor, knowledge, and participation in communities of practice is to diminish possibilities for sustained development of identities of mastery. But if formally mandated forms of mastery are circumscribed, people, nonetheless, do learn and do come to have knowledgeably skilled identities of various sorts. Contemporary forms of learning often succeed in unmarked, unintended ways, and these forms of learning also require first recognition, then explanation. All these concerns indicate that we should not lose sight of the fact that institutional and individual successes and failures of learning are interdependent and are the product of the same historical processes.

In this chapter, I propose to consider learning not as a process of socially shared cognition that results in the end in the internalization of knowledge by individuals, but as a process of becoming a member of a sustained community of practice. Developing an identity as a member of a community and becoming knowledgeably skillful are part of the same process, with the former motivating, shaping, and giving meaning to the latter, which it subsumes. It is difficult to move from peripheral to full participation in today's world (including workplaces and schools), thereby developing knowledgeably skilled identities. This is because the processes by which we divide and sell labor, which are ubiquitous in our way of producing goods and services (including "knowledge"), truncate both the movement from peripheral to full participation and the scope of knowledgeable skill. Taken to an extreme, these processes separate identity from intended forms of knowledgeable practice. This view implies that learning and failure to learn are aspects of the same social–historical processes, and points to relationships between knowledgeability and identity as an important focus for research.

CULTURAL VIEWPOINTS AND THEORIES OF LEARNING

Theories of Situated Experience

It seems useful to introduce the concept of *situated activity* by attempting to clarify differences among its main theoretical variants. Indeed, the term has appeared recently with increasing frequency and with rising confusion about its meaning. Much of the confusion may stem from the assumption that situated activity is a single, unitary concept. However, situated activity is anything but a simple concept; it is a general theoretical perspective that generates interconnected theories of perception, cognition, language, learning, agency, the social world, and their interrelations. Furthermore, there appear to be at least three different genres of situated approaches.

Probably the most common approach is what might be called a *cognition plus* view. According to this view, researchers have for years analyzed the individual, internal business of cognitive processing, representations, memory, and problem solving, and cognitive theory should now attend to other factors as well. People process, represent, and remember in relation to each other and while located in a social world. Therefore, researchers should extend the scope of their intraindividual theory to include everyday activity and social interaction. For proponents of this view, social factors become conditions whose effects on individual cognition are then explored. But cognition, if seen as the result of social processes, is not itself the subject of reconceptualization in social terms. A proponent of this position is likely to argue that a person thinking alone in a forest is not engaged in social cognition.

The *interpretive* view locates situatedness in the use of language and/or social interaction. Interpretivists argue that we live in a pluralistic world composed of individuals who have perspectivally unique experience. This view stands in contrast to that of the first position, which postulates a fixed Cartesian external world in which words have fixed referential meaning and in which rational agents (e.g., "scientists" or "experts"), devoid (ideally) of feeling or interests, are engaged in linear communication of "information" without integral relations of power and control (Rommetveit, 1987). In the interpretive view, meaning is negotiated, the use of language is a social activity rather than a matter of individual transmission of information, and situated cognition is always interest-relative. Feelings and concerns are one important means by which situations are disambiguated and given structure, rather than being the source of distortions of rational thought. In this position there is no world independent of agents' construction of it—thus the emphasis on the constant negotiation and "reregistration" of "the situation." Situatedness here is not equated with physical locatedness in the world, in places, settings, or environments. It is not possible to walk into a situation.

Instead, language use and, thus, meaning are situated in interested, intersubjectively negotiated social interaction. This is different from the constraining physical view of context of most cognitivists.

Rommetveit proposes that the cognition plus and interpretive positions, heretofore disagreeing with each other adamantly, are converging. They are brought together, he argues, by cognitive scientists and artificial intelligence researchers who are adopting a hermeneutic view of situated meaning. The emphasis of several chapters in this volume on language and on socially shared cognition as negotiated meaning supports his proposal. But the two views of situated activity are also brought together by their thorough bracketing off of the social world as an object of study. Such compartmentalization, whether practical or theoretical in intent, has the effect of negating the possibility that subjects are fundamentally *constituted in* their relations with and activities in that world. This bracketing leads proponents of a third position, that of theories of social practice, to argue that the cognition plus and interpretive genres of situation theory are not really about situated activity because each offers only partial specification of key analytic units and questions needed to define situated activity.

The third view, which I will call *situated social practice* (and, where appropriate, *situated learning*), shares several tenets with the interpretive theory of situations. This theoretical view emphasizes the relational interdependency of agent and world, activity, meaning, cognition, learning, and knowing. It emphasizes the inherently socially negotiated quality of meaning and the interested, concerned character of the thought and action of persons engaged in activity. But, unlike the first two approaches, this view also claims that learning, thinking, and knowing are relations among people engaged in activity *in, with, and arising from the socially and culturally structured world*. This world is itself socially constituted. Thus, from this point of view, "nature" is as much socially generated as afternoon tea. And its generation, according to this perspective, takes place in dialectical relations between the social world and persons engaged in activity; together these produce and re-produce both world and persons in activity. Knowledge of the social world is always socially mediated and open-ended. Its meaning to given actors, its furnishings, and the relations of humans with and within it are produced, reproduced, and changed in the course of activity (which includes speech and thought, but cannot be reduced to one or the other). The idea of situatedness in theories of practice further differs from each of the other two approaches in insisting that cognition and communication, in and with the social world, are situated in the historical development of ongoing activity. Thus it is also a critical theory, because the social scientist's practice must be analyzed in the same historical, situated terms as any other practice under investigation. This third position situates learning in social practice in the lived-in world; the problem is to translate this view into a specific analytic approach to learning.

Learning as Legitimate Peripheral Participation: Yucatec Mayan Midwifery

Suppose there is not a strict boundary between the intra- and extracranial aspects of human experience, but rather reciprocal, recursive, and transformed partial incorporations of person and world in each other within in a complex field of relations between them. This assumption follows if we conceive of learners as whole persons, in activity within the world, and it leads to a distinctive description of learning: Legitimate peripheral participation offers a two-way bridge between the development of knowledgeable skill and identity—the production of persons—and the production and reproduction of communities of practice. Newcomers become oldtimers through a social process of increasingly centripetal participation, which depends on legitimate access to ongoing community practice. Newcomers develop a changing understanding of practice over time from improvised opportunities to participate peripherally in ongoing activities of the community. Knowledgeable skill is encompassed in the process of assuming an identity as a practitioner, of becoming a full participant, an oldtimer.

The terms used here—*oldtimers/newcomers*, *full participants*, *legitimate peripheral participants* (but not *teachers/pupils*, or *experts/novices*)—result from a search for a way to talk about social relations in which persons and practices change, re-produce, and transform each other. The terms *master* and *apprentice*, as they are used here, are not intended as a disguise for teacher–pupil relations: Masters usually do not have a direct, didactic impact on apprentices' learning activity, although they are often crucial in providing newcomers to a community with legitimate access to its practices.

Ethnographic studies of apprenticeship learning converge on a series of claims. This seems especially encouraging considering the diversity of forms of apprenticeship reported by anthropologists who have undertaken such research. Ethnographic studies in Mexico (Jordan, 1989), West Africa (Goody, 1982; Lave, 1983), and Hong Kong (Cooper, 1980), and accounts of craft apprenticeship in East Africa (King, 1977), among others, show that apprenticeship occurs in the context of a variety of forms of production (Goody, 1982). Processes of learning are given form in ongoing practice in ways in which teaching is not centrally implicated. Evaluation of apprentices' progress is intrinsic to their participation in ongoing work practices. Hence, apprenticeship usually involves no external tests and little praise or blame, progress being visible to the learner and others in the process of work itself. The organization of space and coordination among participants or, more generally, access for the apprentice to ongoing work and participation in that work are important conditions for learning.

Reanalysis of these cases as instances of learning through legitimate peripheral participation leads to somewhat different conclusions (Lave & Wenger,

1991). One difference of interpretation is particularly relevant here: The process of becoming a full practitioner through increasingly intense, interconnected, and "knowledgeably-skilled" participation, on the one hand, and the organization of processes of work, on the other hand, do not generally coincide at levels at which activity is intentionally organized. It follows that learners' perspectives on work will be different, and their comprehension of the practice will change across the process of learning. The changing relationship of newcomers to ongoing activity and to other practitioners—obviously much more complicated than there is space to discuss here—calls into question the assumption that modes of transmission of knowledge determine the level of generality of what oldtimers understand.

Attempts to compare schooling and apprenticeship have led to some notably converging analyses (e.g., Becker, 1972; see also Geer, 1972; Jordan, 1989; Lave & Wenger, 1991). Becker, for example, recognizes that learning-in-practice is a widely distributed and ubiquitous feature of contemporary life. He observes that apprentice learners are surrounded by the characteristic activities of their trade. Apprentices have the opportunity to see community practice in its complexity early on and have a broader idea of what it is about than just the particular tasks in which they are engaged or that are most easily observable. This appears to be central to processes of learning in apprenticeship. Becker goes on to suggest that, as a consequence of the accessibility of the full round of activities, the apprentice makes her or his own curriculum; apprenticeship thus provides an individualized and realistic learning setting.

Becker also argues that there are two grave difficulties that impede learning in apprenticeship. He believes apprenticeship is flawed in that teaching resources are scarce and must be recruited at the initiative of the individual apprentice. I disagree with this argument and will return to it shortly. The other difficulty has to do with structural constraints in work organizations on apprentices' access to the full range of activities of the job and, hence, to possibilities for truly mastering a trade. He draws on a compelling example, a study of butchers' apprentices in a union-sponsored combined trade school/on-the-job training program (Marshall, 1972). Marshall describes a seriously ineffective program, in which, among other things,

> The supermarket manager sees to it that his skilled journeymen can prepare a large volume of meat efficiently by specializing in short, repetitive tasks. He puts apprentices where they can work for him most efficiently, working at the meat wrapping machine. But the wrapping machine is in a different room from the cold room where the journeymen prepare cuts of meat.

In our terms, the butchers' apprentices are legitimate participants in the butchers' community of practice but do not have access as peripheral participants to the work of meatcutting. Economics, efficiency, control over the intensity and uniformity of labor, segregation of interrelated activities in space and time, the

politics of knowledge control—among other characteristics of the organization of work—can diminish or enhance access, the curriculum, and the general understanding of on-the-job learners.

Forms of apprenticeship vary in the ways and in the degree to which they involve the exploitation of apprentices as sources of free or cheap labor. The institution of apprenticeship in European and American history has a deservedly ugly reputation as a mechanism for recruiting, controlling, and exploiting the labor of children and other newcomers. It is further implicated in the reproduction of structured inequalities of social class in those Western European countries where it is part of state educational systems today. In other historical circumstances (especially those in recent African history in which apprenticeship has been virtually ignored as an instrument of state policy, and where its local developments have a long history of their own), it appears not to have generated sufficiently inequitable power relations between apprentices and those with the economic and cultural capital to sponsor them to permit the growth of the exploitative practices often found where powerful mercantile and industrial forms of capitalist production dominate. Thus, the practices of indenturing, virtual slave labor, and exploitation of children characteristic of apprenticeship in some historical contexts are by no means true of all. The evidence from West Africa, Yucatan, and elsewhere strongly suggests that such exploitation is not a necessary integral aspect of the conditions for learning to labor through apprenticeship. At the same time, where apprenticeship is an exploitative form of labor, this is a characteristic of whatever learning is going on, not merely an exogenous or irrelevant "factor" in the learning setting.

Jordan (1989) has carried out extensive field research on Yucatec Mayan midwives whose apprenticeship is quite different—more effective and less exploitive—than that of the butchers in Marshall's study. These apprentices are peripheral participants, legitimate participants, and legitimately peripheral to the practice of midwifery. They have access to both broad knowledgeability about the practice of midwifery and to increasing participation in that practice. It is worth noting that it would be difficult to find evidence that teaching is the mode of knowledge "transmission" among the midwives. According to Jordan,

> Apprenticeship happens as a way of, and in the course of, daily life. It may not be recognized as a teaching effort at all. A Maya girl who eventually becomes a midwife most likely has a mother or grandmother who is a midwife, since midwifery is handed down in family lines. . . . Girls in such families, without being identified as apprentice midwives, absorb the essence of midwifery practice as well as specific knowledge about many procedures, simply in the process of growing up. They know what the life of a midwife is like (for example, that she needs to go out at all hours of the day or night), what kinds of stories the women and men who come to consult her tell, what kinds of herbs and other remedies need to be collected, and the like. As young children they might be sitting quietly in a corner as their mother administers a prenatal massage; they would hear sto-

> ries of difficult cases, of miraculous outcomes, and the like. As they grow older, they may be passing messages, running errands, getting needed supplies. A young girl might be present as her mother stops for a postpartum visit after the daily shopping trip to the market. Eventually, after she has had a child herself, she might come along to a birth, perhaps because her ailing grandmother needs someone to walk with, and thus find herself doing for the woman in labor what other women had done for her when she gave birth; that is, she may take a turn . . . at supporting the laboring woman. . . . Eventually, she may even administer prenatal massages to selected clients. At some point, she may decide that she actually wants to do this kind of work. She then pays more attention, but only rarely does she ask questions. Her mentor sees their association primarily as one that is of some use to her ("Rosa already knows how to do a massage, so I can send her if I am too busy"). As time goes on, the apprentice takes over more and more of the work load, starting with the routine and tedious parts, and ending with what is in Yucatan the culturally most significant, the birth of the placenta.[1]

Jordan has described a situation in which learning is given structure and shape through peripheral participation in ongoing activity. Learning activity is improvised in practice; some of its goals are clear to learners early in the apprenticeship.

But these claims are subject to Becker's concern that lack of intentional guidance and instruction makes learning difficult if not impossible. My disagreement with this point grows out of a recognition that there are resources other than teaching through which newcomers grow into oldtimers' knowledge and skill. These resources are to be found in at least two aspects of apprenticeship. One is the existence of a broad view of what is to be learned from the very beginning. Broad exposure to ongoing practice, such as that described for the midwives' apprentices, is in effect a demonstration of the goals toward which newcomers expect, and are expected, to move. The other is the notion that knowledge and skill develop in the process—and as an integral part of the process—of becoming like master practitioners within a community of practice. This more inclusive process of generating identities is both a result of and motivation for participation. It is through this process that common, shared, knowledgeable skill gets organized, although no one specifically sets out to inculcate it uniformly into a group of learners. It is rarely the case that individual apprentices must take the initiative in getting someone to teach them in order to learn in circumstances where ongoing everyday activity provides structuring resources for learning. Gradually increasing participation in that practice, and a whole host of relations with the activities of

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[1]From "Cosmopolitical Obstetrics: Some Insights From the Training of Traditional Midwives" by B. Jordan, 1989, *Social Science and Medicine 28*(9), p. 932. Copyright 1989 by Pergamon Press. Reprinted by permission.

more and less adept peers, also provide resources for learning. (I shall return shortly to the question of the availability of structuring resources for learning in contemporary places of work.)

In short, investigations of situated learning focus attention on ways in which the increasing participation of newcomers in ongoing practice shapes their gradual transformation into oldtimers. Newcomers furnished with comprehensive goals, an initial view of the whole, improvising within the multiply structured field of mature practice with near peers and exemplars of mature practice—these are characteristic of communities of practice that re-produce themselves successfully.

Identity in Participation: Alcoholics Anonymous

The description of Yucatec apprenticeship in midwifery provides a sense of how learning in practice takes place and what it means to move toward full participation in a community of practice. A more detailed view of the way in which the fashioning of identity is the means through which members become full participants, and how this subsumes the kind of knowledge and skill usually assumed to be the goal of newcomers' activity, may be found by analyzing the process of becoming a nondrinking alcoholic through Alcoholics Anonymous (AA).

It may seem unusual to characterize AA as a learning environment. But this characterization follows from the view of learning as legitimate peripheral participation in communities of practice. Indeed, analyzing communities of practice as sites of learning is one of the most useful characteristics of a theory of socially situated activity. AA, then, constitutes a community of practice, one in which newcomers gradually develop identities as nondrinking alcoholics. Cain (1991) argues that, in learning not to drink,

> The change these men and women have undergone is much more than a change in behavior. It is a transformation of their identities, from drinking non-alcoholics to non-drinking alcoholics, and it affects how they view and act in the world. . . . By "identity" I mean the way a person understands and views himself, and is viewed by others, a perception of self that is fairly constant. . . . (pp. 210, 212)
>
> As a cultural system, and one that no one is born into, all of the beliefs of AA must be learned. The propositions and interpretations of events and experiences, the appropriate behaviors and values of an AA alcoholic, and the appropriate placement of the alcoholic identity in the hierarchy of identities one holds must be learned. In short, the AA identity must be acquired, and its moral and aesthetic distinctions internalized. This cultural information is transmitted through the AA literature, and through talk in AA meetings and in one-to-one interactions. One important vehicle for this is the personal story. (p. 215)

New members of AA begin by attending meetings at which oldtimers give testimony about their drinking past and the course of the process of becoming sober. The contribution of an absolutely new member may be no more than one silent gesture—picking up a white chip at the end of the meeting to indicate the intention not to take a drink during the next 24 hours. Oldtimers may have told polished, hour-long stories, months and years in the making, of their lives as alcoholics. Cain argues that the main business of AA is the reconstruction of identity, through the process of construction of these life stories, and with them, the meaning of the teller's past and future action in the world.

An apprentice AA member attending several meetings a week spends that time in the company of near peers and adepts and, in the testimony at early meetings, has access to a comprehensive view of what the community is about. There are also clear models for constructing AA life stories in published accounts of drinkers' lives and in the storytelling performances of oldtimers. Goals are also made plain in the litany of the 12 Steps to sobriety, which guides the process of moving from peripheral to full participation in AA. Early on, newcomers learn to preface their contributions with the simple identifying statement "I'm an alcoholic" and, shortly, to introduce themselves and sketch the problems that brought them to AA. They begin by describing these events in non-AA terms. Their accounts are countered with exemplary stories by more experienced members who do not criticize or correct newcomers directly. Newcomers gradually generate a view that matches more closely the AA model, eventually producing skilled testimony in public meetings and gaining validation from others as they demonstrate appropriate understanding (Cain, 1991). The "12th Step" visit to an active drinker to try to persuade that person to become a newcomer in the organization initiates a new phase of participation, now as a recognized oldtimer.

There seem to be two kinds of meetings in AA, general meetings and discussion meetings. The latter tend to focus on a single aspect of what in the end will be a part of the reconstructed life story (perhaps one of the 12 Steps): "admitting you are powerless," "making amends," or "how to avoid the first drink" (Cain, 1991). These discussions have a dual purpose. Participants engage in the work of staying sober and, through this work, in the gradual construction of an identity. The notion of partial participation in segments of work that increase in complexity and scope (also a theme in Jordan's analysis) describes the changing form of participation in AA for newcomers as they gradually become oldtimers. In due course, those who move centripetally into full participation become increasingly good at not drinking, at making amends, at reconstructing their lives in terms of AA, at constructing AA stories, and at telling such stories—some of the knowledgeable skills subsumed in becoming a nondrinking alcoholic.

The Yucatec midwives' apprenticeship and Alcoholics Anonymous both seem straightforward in the sense that learners have access to the everyday activity involved in being and becoming members. There do not appear to be devastating

structural barriers in the practice of midwifery or in belonging to AA that prevent newcomers from gradually becoming oldtimers themselves. Given that part of the activity an organization must engage in to survive is the organization of its own reproduction, structural barriers to learning cannot be the only relevant organizational forces at work. No rational organization can exempt the production of oldtimers from its agenda of crucial structural arrangements, and giving learners access to full participation is a condition for meeting this goal. Nonetheless, the ideas sketched here so far paint too clean and consistent a picture of learning activity, in several respects.

HISTORICAL ANALYSIS, COMMUNITIES, AND COGNITION

Communities of Practice and Processes of Learning

I began with the proposition that participation as members of a community of practice shapes newcomers' identities and in the process gives structure and meaning to knowledgeable skill. I have treated this process as a seamless whole. But there are ubiquitous structural discontinuities in learning processes. Learning in any setting is a complex business that to some extent involves irreducibly contradictory interests for the participants. This is as true of Yucatec midwifery and AA as of every other community of practice. The process of becoming a full practitioner in a community of practice involves two kinds of production: the production of continuity with, *and* the displacement of, the practice of oldtimers (Lave & Wenger, 1991). Newcomers and oldtimers are dependent on each other: newcomers in order to learn, and oldtimers in order to carry on the community of practice. At the same time, the success of both new and old members depends on the eventual replacement of oldtimers by newcomers-become-oldtimers themselves. The tensions this introduces into processes of learning are fundamental.

This proposition does not put an end to the relations of production of learning. The construction of practitioners' identities is a collective enterprise and is only partly a matter of an individual's sense of self, biography, and substance. The construction of identity is also a way of speaking of the community's constitution of itself through the activity of its practitioners. It further involves a recognition and validation by other participants of the changing practice of newcomers-become-oldtimers. Most of all, without participation with others, there may be no basis for lived identity. This conception of learning activity draws attention to the complex ways in which persons and communities of practice constitute themselves and each other.

Marxist sociologists have explored just such relations of incorporation between persons and communities of practice, viewed as processes of *subjectification*

and *objectification*, and have tried to grapple with their particular character in contemporary society. Analysis begins with the most basic structural principles shaping this society. Persons, and their participation in communities of practice, are grounded in the contradiction associated with commoditization of production. The products of human labor are turned into commodities when they cease to be made for the value of their use in the lives of their makers and are produced in order to exchange them, to serve the interests and purposes of others without direct reference to the lives of their makers. As such, the results of labor are removed further and further from their common place in the lives of the laboring people who produce them in exchange for money in an anonymous global market, intensified still further when the *labor* that goes into making things suffers the same fate.

Commoditization places people between the pincers of two systematically interrelated aspects of the concept of alienation. One is the anthropomorphizing of objects as they become central forms of connectedness between people. The other is the objectification of persons as they take on exchange value as sources of labor power (e.g., an "A" student, wage labor "employees"). These concepts provide a useful focus for the present discussion because they pertain to a level of belief and action in the world at which participation, the fashioning of identity, and skillful knowledgeability are configured in practice. The first concept (fetishizing, anthropomorphizing) relfects the fact that, as a consequence of structuring relations among the *products* of human activity in terms of exchange value, we have come—mistakenly—to give objects (in all senses of that word) the properties of power, intention, and action that rightly belong only to whole human agents in communities. An anthropologist's (WMO) interview with the director of international advertising for Coca-Cola (MM) provides a vivid example of this phenomenon:

WMO: There's a phrase that sometimes passes in the academic community—"Coca-colonization" of the world—which I'm sure you've heard before.

MM: Yeah. I've heard it before. I don't think it's fair, really. Coca-Cola just happens to be the most successful of world brands, and people pick at it for that very reason. . . .

WMO: Is it wrong or just that's how you feel?

MM: It's wrong because *all the thing wants to do is to refresh you, and it is willing to understand your culture, to be meaningful to you and to be relevant to you. . . . I don't think that Coca-Cola projects. I think that Coca-Cola reflects.*

WMO: Reflects in what sense?

MM: A lifestyle, a civilization, a culture.

WMO: Is it independent from that? It hasn't partly created that?

MM: *Coca-Cola looks at it and then puts a mirror in front of you. Sometimes it puts a window in front of you that allows you to see how you'd like to be.*[2]

Not only have qualities of human agency been attributed to products such as Coca-Cola, but knowledgeable skill (e.g., expertise, IQ) has been endowed with separate and lively properties independent of the communities of which knowledge is a distributed, integral dimension.

The other aspect of alienation follows from the commoditization of labor through the selling and buying of the labor power of human beings (wage labor) who having sold their labor power, no longer turn their hands primarily to fashioning the solutions to their own needs. Alienation in this sense involves the idea of separation—of the abstraction or extraction of central forms of life participation (e.g., work, knowing, or doing something skillfully) from the human lives that really produce them, thus mistakenly giving human agents properties of objects. In particular, this implies that human activity becomes a means rather than an end in itself; people become hired *hands* or *employ-ees* rather than masters of their own productive activities.

These are powerful aspects of Western political economy and culture. They are relevant to a situated analysis of relations between the development of knowledgeable skill and the construction of identity, membership, and communities of practice, although, so far, I have treated membership and knowledgeability in unified terms as "mastery" or full participation. The conception of an oldtimer as a master practitioner does not reflect the ways in which the construction of identity and knowledgeable skill are characteristically shaped and misshapen when alienation—the effects of objectifying human beings and anthropomorphizing objects—prevails. Part of what gives the notion of mastery its seamless connotations is that it unites the identity of master with skilled knowledgeability. Apprenticeship thus seems to escape from the effects of commoditization. In the world today, however, much of human activity is based on the division of and selling of labor for a wage. Having a price has changed indelibly the common meaning of *labor*. The agent has little possibility of fashioning an identity that implies mastery, for commoditization of labor implies the detachment of the value of labor from the person. In such circumstances, the value of skill, transformed into an abstract labor power, is excised from the construction of personal identity. If becoming a master is not possible in such circumstances, the value accruing to knowledgeable skill when it is subsumed in the identity of mastery devolves elsewhere or disappears.

[2]From "The Airbrushing of Culture: An Insider Looks at Global Advertising" by W. O'Barr, 1989, *Public Culture*, 2(1), p. 15. Copyright 1989 by the Center for Transnational Cultural Studies. Reprinted by permission. Italics added.

This analysis places the concept of learning-in-practice in jeopardy. On the one hand, it appears that conditions for learning in contemporary society limit the possibility of mastery to just those forms of activity that continue to be associated with apprentice forms of learning—for example, in graduate programs in universities and in the practice of medicine, law, and the arts. On the other hand, I have argued that learning occurs under just the circumstances where the fashioning of identity and the gradual mastery of knowledgeable skill are part of an integral process of participation. How can this be?

The Workplace and School

In the contemporary world, both Yucatec midwifery and Alcoholics Anonymous lie outside the world of schooling, workplaces, and marketplaces (although they are not immune to their effects, e.g., Jordan, 1989). To take seriously the assumption that the contemporary social world can be described in the terms just proposed, involving the alienation of knowledgeable skill from the construction of identity, it might be useful to examine settings in which these effects are, arguably, most concentrated: contemporary workplaces and schools. Two principles emerge from this exercise, concerning relations between communities of practice on the one hand and the broader situatedness of such communities in a social formation as a whole on the other hand. The first principle is the prevalence of negatively valued identities (e.g., "We're just Loggers" or "We don't know *real* math"), and the second is the ad hoc, interstitial nature of communities of practice in which identities *are* formed and sustained knowledgeability is made possible.

Let us consider each principle in turn. First, the working out of relations of commodification and, thus, alienation shape experience and interpretations of experience and contribute to the creation of devalued or negatively valued identities. Commodification and alienation also contribute to the devaluation of *persons*' knowledgeable skill by comparison with the reified value of knowledge as a commodity. Second, structural constraints *on* (rather than within) communities of practice are important in the production of negative valuation of being and doing. That is, occupational and production-line specialization and other strategies for controlling—by dividing—work and workers narrow the possibilities for what may be learned (and, with them, the significance of membership) to an absurd minimum. The value of mastery in a community of practice diminishes if the process of centripetal participation is correspondingly limited or extinguished. The value of being an oldtimer may be reduced to whatever value there is in having existed in a given setting over a long period of time.

Where the scope of the ongoing activities of a community of practice is in close approximation to levels of human organization at which coherent, meaningful

participation in activity is possible, as among the midwives and nondrinking alcoholics, conditions and resources for centripetal participation and eventual mastery are available. But there is a paradox here. It is exactly in those organizations in which control through the narrowing, trivialization, and decomposition of full participation is most common—in schools and workplaces—that learning is most often an institutional motive and yet, by the argument here, most likely to fail. On the other hand, conditions for learning flourish in the interstices of family life, in the participation of children in becoming normal adults (Fortes, 1938; Goody, 1989), in professions that have not yet been specialized out of intelligibility, in officially neglected areas of cultural production (e.g., Alcoholics Anonymous, rock music), in sports, and so on. And legitimate peripheral participation also has a place in sites of wage labor, although it follows from the argument about commodification that communities of practice are unlikely to exist there in formally defined ways.

Indeed, communities of practice in workplaces and schools are mostly ad hoc. In the workplace, people who are members of work groups in formal terms often form sustained but disjunctive communities of practice, as in the shop floor culture described by Willis (1977). These communities shape the ways in which work and play are produced, their meaning, and the skilled, stylized relations among oldtimers to which newcomers aspire—in short, forms of mastery. These communities of practice alone do not account for the organization of everyday activity in work settings, of course, but strongly shape the social practice of work, nonetheless.

Although the specific mechanisms are different, the decomposition of activity to the point of meaninglessness and the formation of informal communities of practice are to be found in schools as well as in the workplace. Standardization of curricula and examinations, evaluation through grading, the deskilling of teaching (Apple, 1979), relations between the decomposition of school knowledge by teachers and their control over students in classrooms (McNeil, 1986), and forms of student stratification and classification in schools all serve to reduce the meaning and even the possibility of engaging as a peripheral participant in knowledgeably skilled activity in the classroom. Furthermore, children form ad hoc communities of practice mostly outside the classroom (e.g., Willis, 1977). Becker (1972) hints at this when he says that children in school learn best what the school does not teach. "Burnouts" and "jocks" are more likely to exemplify mastery in a community of practice than are solid geometry students (Eckert, 1989). There are even interstitial communities of practice *in* classrooms, where, for example, newcomers generate distinctions between "real, valued knowledge" and what they themselves do, and consequently consider themselves inadequate even many (competent) years later (Lave, 1988).

In short, when official channels offer only possibilities to participate in institutionally mandated forms of commoditized activity, genuine participation,

membership, and legitimate access to ongoing practice—of a practice considered worthy of the name—are rare. At the same time, schools and school-like workplace educational enterprises accord knowledgeable skill a reified existence, turning it into something to be "acquired" and its transmission into an institutional motive. This process generates pressures toward the trivializing decomposition of forms of activity. The result is a widespread generation of negative identities and misrecognized or institutionally disapproved interstitial communities of practice.

Internalization and Learning Transfer: A Situated Critique

At this point, I would like to reconsider two fundamental questions in contemporary theorizing about learning. These questions are generally conceptualized in ways that suffer from the same overly simplistic character of my initial notion of mastery. *Internalization* is the cognition plus approach's answer to the question of how the social world and the individual come to have a good deal in common. This view of learning as ingestion (with teaching as feeding) is undergoing modification. This volume demonstrates the importance of social interaction, the joint construction of meaning, the distributed character of knowing, and, hence, the partial, transformed, situated nature of that which is taken in. But internalization might also be conceived of as the sum or, perhaps better, the structure of relations of subjectification and objectification of a human agent. According to this view, internalization must take historically and culturally specific forms. The transformations involved in these processes guarantee that a "straight pipe" metaphor of knowledge channeled into learners cannot be a reasonable way of characterizing that highly complex and problematic process.

Learning transfer is meant to explain how it is possible for there to be some general economy of knowledge so that humans are not chained to the particularities of literal existence. The vision of social existence implied by the notion of transfer, which accompanies equally colloquial notions of internalization treats life's situations as so many unconnected lily pads. This view reduces the organization of everyday practice to the question of how it is possible to hop from one lily pad to the next and still bring knowledge to bear on the fly, so to speak.

Two arguments have been developed that recommend against this vision of social life. The first is a very general proposition, reflected in anthropology's holistic approach (and in notions like that of a "social formation" or "social system"), that the structure of the social world as a whole is both constituted and reflected in the structures of its regions, institutions, and situations, so that they are neither isolated from one another nor composed of unconnected relations. The historical present addressed here offers an especially eloquent example: If communities of practice are located interstitially in institutional settings (both schools and workplaces) that prescribe their own versions of organization and proper

practice, then most people are engaged in complexly interconnected "situations" for extended portions of their everyday lives. Willis (1977) uses the notion of *double articulation* to describe meaning and action in the lives of working class lads, in the informal group of the school and in shop floor culture in the workplace. Thus, the lads' everyday practice in school is both a reaction against the institutional practices of the school and an elaboration of working-class family, street, and shop floor culture in the school setting.

Second, the same structural principles that generate limited institutional possibilities for forming work identities, that transform productive activity into nonspecific labor for a wage, and that generate characteristic distortions in the objectification and subjectification of persons, activity, and world in practice, also generate characteristic forms of interconnectedness among situated practices (e.g., between shop floor and school counterculture). These, in turn, surely contribute to characteristic forms of improvised knowing and doing around these articulations. The alternative offered by a theory of situated learning to static situations and nongenerative reified views of knowledge begins with the claim that, in practice, structure and experience together generate each other. In so doing they constitute characteristic substantive relations among persons acting, settings, situations, systems of activity, and institutions. Such relations of articulation are culturally, historically specific; they are, arguably, key signatures of particular social formations. They include characteristic processes through which persons' understanding in practice changes.

CONCLUSION

I began this chapter by laying out several theoretical approaches to situated activity. I have eschewed the cognition plus view on grounds that anyone starting from a cognitivist position must come face-to-face, sooner or later, with the difficulty of treating either cognitive processes or features of situations as situated entities when their analytic meaning is predicated on a radical disjunction between them. My disagreement with the interpretive view is perhaps less obvious. An analysis of structure is basic to the argument about commodification: There are structuring relations between the scope of participation (and potential mastery) in communities and the production of that scope in relations of commodification and the characteristics of divided forms of labor; there are structuring relations between institutional social arrangements and the conjunctive and disjunctive character of communities of practice therein. I doubt that either of these structuring relations is recoverable solely through the analysis of interested negotiated meaning in social interaction.

The main part of this chapter explored ways in which communities of practice and cultural processes of identity construction shape each other. Along the way,

I sketched a series of conceptual interdependencies among person, activity, knowledge, and world that recommend a conception of learning as "legitimate peripheral participation in communities of practice." I argued that relations between subjects and objects in the world are shaped by their cultural and historical circumstances in processes that involve the subjectification of objects and the objectification of persons, and that often generate negative identities and ad hoc communities of practice. Such a view offers a means with which to replace an unproblematic notion of cultural transmission/internalization with a historically situated analysis of relations among activity, the social world, and persons in practice. Objectifying persons and the personalizing of commodities are situated principles of thought and interpretation, as well as structural principles in the formation of communities of practice.

This analysis of learning as situated social practice suggests a number of further research questions, beginning with the interrelations of communities of practice and the formation of valued identities of mastery through legitimate peripheral participation. Such questions revolve around issues of legitimate access, the conflictual conditions for mastery, and, thus, the form and location of communities of practice. The object of learning surely becomes full, strongly valued participation and deeply transformed forms of understanding. How can we address learning phenomena of such extended scope? It would be useful to inquire more deeply into the double and multiple articulations of ongoing activity in given situations and to explore various *forms* of tension and conflict over continuity and displacement in different communities of practice. It also seems useful to inquire into salient identities from the points of view of members themselves, and to ask what learning curriculum is afforded by the legitimate participation that makes it possible for newcomers to become oldtimers in a given setting. That is, there is a great deal to be learned about communities of practice and the community's knowledgeable skill in schools and workplaces that cannot be learned if institutional boundaries and programs are assumed to define the lived character of social practice.

This suggests more specific questions about curricula of practice. What are the characteristics of communities of practice that make broad accessibility to the whole steadily available to newcomers? I have claimed in passing that changing relations of newcomers to work processes, as learners move centripetally toward full participation, make possible a changing understanding of the community's activities. But communities make possible certain kinds of *transformations* of understanding, identity, and knowledgeable skill, not simply changes of a quantitative sort. What are the conditions that make deep transformations possible? Near-peer relations seem to facilitate sharing of knowledgeable skill; how is this possible, what does it mean in historically and culturally specific terms, and how is it embedded in processes of becoming a full practitioner? Both transformations of understanding and relations with peers raise questions about the cycles by which

newcomers become oldtimers, who thereby become the community of practice for the next newcomers, transforming their understanding as they transform their identities. Changed understanding is also forged (or not forged) in cycles of work, both long and short, and in relations of communities of practice to larger institutional orders. To understand all of this would be to understand the structure of transformations of knowledgeable skill and identity as well. Together, these questions recommend a close examination of ongoing social practice as the key to understanding situated learning.

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