

THE FUTURE OF PROFESSIONS:
OCCUPATION AND EXPERTISE IN
THE AGE OF ORGANIZATION

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ABSTRACT

This paper examines the tradeoff between three modes of embodying expertise: in professions, in organizations, and in commodities. It surveys the differing abilities of these modes to institutionalize and reproduce expertise as well as to make expert services efficient and profitable. It also considers secondary functions served by these modes of expertise, such as the provision of avenues for individual social mobility. I conclude that professions will survive the onslaught of organizations, although probably in modified form. The paper ends with a discussion of the variables influencing that form.

In the battle for Russia, Tolstoy tells us, the merit of the Russian commander Mikhail Ilarionovitch Kutuzov "lay in no sort of military genius, as it is called, in no strategic manoeuvre, but in the fact that he alone grasped the significance of what had taken place...." By contrast, "Napoleon in his activity ... was like

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a child, sitting in a carriage, pulling the straps within it, and fancying he is moving it along" (Tolstoy [1869] 1911, pp. 1068, 1088). Napoleon, that is, thought he could not only predict but also shape the future. Kutuzov knew that even prediction was impossible; to think of the future was merely a way to understand the present.

History tells us whose judgment was better. In what follows, I shall therefore take Kutuzov's position. To write of the future of professions is not to predict their appearance in 2020, but rather to envision professional futures in order to discover the drift of the professional present. We can know little about future social structures; this paper will no doubt prove wrong as a prediction, and wrong in ways that will be retrospectively quite obvious. But like Kutuzov, we want to understand the present; thinking about the future forces us to do that.

To analyze the future we must first identify some basis for imagining it. There are, in fact, several places to begin. For example, one could start by discussing exactly what a profession is. But the numbers of possible definitions are overwhelming. Moreover, because the term "profession" is more an honorific than a technical one, any apparently technical definition will be rejected by those who reject its implied judgments about their favorite professions and nonprofessions. To start with definition is thus not to start at all.

A more hopeful beginning lies in asking where professions came from; perhaps that will tell us where they are going. Indeed, a vast literature on professionalization describes how this or that profession developed associations, licensing, and the other paraphernalia of professionalism. But knowing how professions achieved full professionalism tells us little about what they will do once having arrived there. Moreover, because the developments of the various professions are interdependent, prediction of this sort must extrapolate a complex system, not the simple linear developments of individual cases (Abbott 1988).

Thus neither the definitional nor the historical question effectively supports an analysis of the future of professions. The proper first question is rather a functional one: how is expertise to be socially structured? Or, to put it more formally, how is expertise institutionalized in society? At mid-century, the answer to that question was undoubtedly "through the professions." Forty years later, there are other possibilities.

Functional analysis of course has its detractors. Functionalists have often reified existing institutions by saying that such institutions optimally embody certain socially necessary functions, thereby ignoring disequilibria, system change, functional particularism, and so on. But I shall here reverse the usual functionalist procedure. I shall propose a necessary function and then consider the forces that determine which social structures serve it. I shall then use what we know about changes in those forces to envision the future of professions and of the other social structures—organizations and commodities—that serve the function of embodying expertise.

Two factors will complicate the analysis. The first involves secondary functions of professionalism and other expertise structures, unintended but nonetheless central tasks that they accomplish. Because such secondary functions help determine the future of professionalism and its peers, I must consider other ways those secondary functions are served. Second, my extrapolations question the ability of professions to coalesce, to come together as social groups *für sich*, under the increasing power of organizations. I therefore close with a discussion of this problem of coalescence, which arises from, but is not immediately a part of, my investigation of the future of professions.

So broad an argument inevitably begins with disclaimers. I have already noted that I will not define "profession." I have dealt with that issue elsewhere (Abbott 1988, chap. 1). I have also mentioned the well-known difficulties of functionalism. Finally, I should note the inescapable transformation of changes in quantity into changes in quality that slowly undermines the very terms of my analysis. The groups I shall call professions throughout their past, present, and future change their character rather completely over that time, even though one cannot point to any exact moment at which the change takes place. This is a disturbing, but inevitable, correlate of serious historical analysis. I shall return to it later on.¹

THE INSTITUTIONALIZATION OF EXPERTISE

By expertise I mean the ability to accomplish complicated tasks: I could alternatively speak of it as complex knowledge. There is good reason to avoid choosing between the two definitions. For one thing, "expertise" (like "profession") is a definitional bog from which one might never emerge. For another, definitions of complexity are relative in social time and space. But most importantly, specific definitions make implicit assumptions. To focus one's definition of expertise on knowledge emphasizes a knowing subject, which in turn half-assumes that expertise is necessarily a property of human individuals, precisely the assumption I wish to question. To focus on action, by contrast, emphasizes an executive agent, who may in fact merely organize others' knowledge. It also ignores academic professional knowledge, which is seldom directly used. I shall thus leave my definition of expertise deliberately vague, insisting only that it combine knowledge and action and that it involve some degree of socially-defined complexity. In order to focus my topic, I shall consider only "mental" expertise. Craft labor has already been considered by the deskilling literature; moreover, some of the forces affecting it differ sharply from those affecting "professionalizable" expertise.²

Institutionalization is a more controversial concept than expertise. It refers to the emergence of clusters of social organization carrying out general social

functions. (I make no assumptions about whether that emergence takes place through power relations or through differentiation and evolution.) At the simplest level, institutionalization of expertise means the emergence of a set of roles for handling it, a set of roles to play relative to it, and arrangements of those norms and roles into larger structures—organizations for delivering expert services, hierarchies of types of expertise, routines for reproducing expertise, and so on. For example, under the regime of institutionalized professionalism, the roles include those of professional and client, the norms concern such matters as client service and ethical behavior, and the structures are hospitals, law firms, and other intra- and interprofessional hierarchies and groups. Other types of institutionalization are equally straightforward, if less familiar.

These concepts of expertise and its institutionalization meet the usual criticisms against naive functionalism. First, it is not a reification to assert that expertise is institutionalized in modern societies (i.e., that expertise can be treated as a necessary social function to be institutionalized). Expertise obviously plays central roles in modern society. That so central a resource will take a characteristic social shape (i.e., be institutionalized) follows both from functionalist and rational action premises. Under the former, it follows because functional feedback loops will preferentially maintain more efficient means of serving a function (Stinchcombe 1968), a preference that will tend to emphasize one functional structure unless there are no differences in efficiency. Under the latter, it follows because individual conflicts over expertise (e.g., between professional and client) will be shaped by characteristic distributions of power vis-à-vis expertise (e.g., all professionals of a given kind and their clients tend to fall into one of a few characteristic power relations) and hence will tend to end in characteristic ways. Such arguments make it plausible to take expertise as being institutionalized in the broad sense of being embodied in a set of social structures and governed by certain legitimating norms and values, provided that we recall that structures, norms, and values are all subject to continuous contest and change.³

A second criticism of naive functionalism mentioned above is its ignorance of functional alternatives. In a typical functional system, there are in fact not one but several sets of activities each of which can serve the function involved, in this case that of institutionalizing expertise. I shall focus precisely on three such functional alternatives: expert individuals, expert organizations, and expert commodities. Moreover, because each of these serves other functions as well as that of institutionalizing expertise, I shall remark shifts in those other functions as well. In particular, the institutionalization of expertise in individuals serves important social mobility functions, as Ben-David (1963) noted over two decades ago. And the institutionalization of expertise in organizations allows nonexperts to reap part of the profits of expertise, a secondary function not to be ignored. Thinking about the future of professions

functionally means thinking about these secondary or latent functions as well as about primary, manifest functions. If we bear in mind, then, that social structures are multifunctional, that social functions are multiply served, and that strong functional assumptions about the institutionalization of expertise are unnecessary and dangerous, we shall not come to grief over the issue of functionalism alone.

THE MEANS OF INSTITUTIONALIZING EXPERTISE

Given that modern society produces and uses large quantities of expertise, how and where does that expertise get stored, produced, and embodied? The storing and production of expertise in universities, journals, and similar social structures I have handled elsewhere (Abbott 1988, chaps. 2, 7). But embodiment of expertise in agents who (that) can apply it is particularly important, because embodiment has been the chief role of the individual professional during the period of mass professionalism from 1850 to the present. There are three alternatives. Expertise can be embodied in commodities like expert systems and Hollerith machines. It can be embodied in organizations, as in hospitals and architectural firms. It can be embodied in individuals, as in doctors, social workers, and academics. Let us now consider the age, temporal pattern, social location, control, and economic structure of each particular way of embodying expertise.⁴

Expertise in Commodities

Several different kinds of commodities contain expertise. Perhaps the oldest are forms. A form for a will, for example, contains within its very organization some of the expertise a lawyer would offer in drawing a will. Logarithmic plotting paper contains in its lines the expertise necessary to estimate definite values of the integral of the function $1/x$. In both cases, the information may also be embodied in printed materials—law books and logarithm tables; but while these are generally available, they are easily used only by trained individuals.

A second important class of commodities embodying expertise are machines. An X-ray machine, for example, directly replaces (and hence embodies) the knowledge of bone breaks that doctors used to acquire through manipulation; it may of course be used by those not expert in that previous knowledge. A CAD machine similarly embodies knowledge about the drafting of circuits or buildings. A third class of expert commodities is that of algorithms and routines, whether written into software or published as simplified formulas. Most social science statistics is of this form, the majority of its users being unable to invert matrices, for example, but quite happy to use published regression algorithms that do so.

Although often considered to be recent, commodification of expertise is quite old. Battles between the English lawyers and the legal stationers who provided do-it-yourself forms are centuries old. The medical equivalent of do-it-yourself legal forms—the self-help manual—is equally ancient. Even in architecture, we find that much of nineteenth-century American housing was built from widely disseminated books of plans. There is no warrant for thinking commodification a “new problem” in the world of expertise.

The rate of commodification over the last two centuries seems quite steady. There are no sudden spurts, but rather a steady creation of expert commodities. In medicine there are the self-help manuals, the premixed (as opposed to doctor- or pharmacist-mixed) pills, the endless parade of diagnostic machines (many of them long gone today). In accounting there is a steady proliferation of machines and of published accounting systems and rules. In law, the individual learning of lawyers was gradually replaced by a massively-indexed common citation system. At any point where we dip into the history of professions, we will find extensive, ongoing commodification.

Commodification has tended to involve the “bottom end” of expert work. Commodities have tended to take over (or to be delegated) routine, simple functions, the more esoteric functions being retained by expert individuals. It is this aspect of commodification that has changed with expert systems, which are aimed less at the truly routine than at the middle levels of current professional work.

Commodification has often been initiated and controlled by the professions themselves. Lawyers want legal forms, for example, when they themselves can use and control them. Legal citation tools and librarians’ reference tools are commodities initiated and largely controlled by the relevant professions. On the other hand, pharmaceutical knowledge—now largely commodified in premixed medicines—is almost completely controlled by manufacturers. Although with some exceptions these manufacturers are of medical origin, they now owe little allegiance to the professions they “serve.” While often under the control of professions, then, commodification is by no means always so.

Commodity expertise is a capital good in the technical sense; that is, it is used but not used up in the production of expert work. Therefore, it is ultimately subject to the forces and strains affecting capital generally, in particular to pressure from lay entrepreneurs who wish to commandeer its rents. Like other capital goods, commodity expertise is easier for entrepreneurs to control than are the expert individuals who must otherwise be used. This makes entrepreneurs more likely to begin their invasion of the world of expertise via commodities. However, commodity expertise has the failing of being unable to reproduce itself; it must be generated elsewhere. There is little likelihood that this situation will change in the immediate future.

In summary, commodification of expertise is an old and steady process that tends to affect the most routine level of expertise, although recently it shows

signs of extending above that level. It involves the creation of capital goods, often by expert individuals, which goods are then potentially at the disposal of lay entrepreneurs.

Expertise in Organizations

The principal organizational structure that contains expertise is the division of labor. When a machine is manufactured by divided labor, the design of the machine, the partitioning of the tasks involved in building it, and the order of the assembly process are all contained in the organization itself. Its role assignments, its rules of procedure, and its interrelations encode that design, partitioning, and order in a formal structure independent of any set of individuals, expert or otherwise. Of course this encoding comes, originally, from some group of designers, and, moreover, it cannot really change itself without their help. But in a temporary sense, an organization contains a large amount of manufacturing expertise even if it has only a programmed-in approach derived from its originating designers.

Division of labor in expert services proceeds in precisely the same fashion. Within the organizational structure of a hospital are encoded the design of a certain type of health care, the partitioning of the tasks carrying it out, and an order of their performance. The hospital’s role assignments, its rules of procedure, and its interrelations actually contain an expertise of health care: an interventionist expertise as opposed to a preventionist one, an episodic as opposed to a permanent one, a technical as opposed to a spiritual one. The same may be said, in a different context, of accounting, architectural, and law firms. There, too, the organization itself embodies in its organizational plan and procedures a considerable amount of expert information. There, too, the firms encode a particular version of expert services.

As in the case of commodities, the expertise encoded in organizations becomes an alternative to that of expert individuals. By accepting and fixing a certain version of expert services and by breaking those services down into the truly expert and the truly routine, organizations enable fewer individual experts to do more work. While the idea of organizations containing expertise may seem reificatory, in fact it is a logical extension of the commodification concept; organizations are simply a different way of commodifying expertise.

There is no simple term for the process of embodying expertise in organizational structure. I shall generally call it “bureaucratization” below, narrowing the usual sense of that word; it refers here to the division of expert labor (DOEL) in particular. I use this latter term (DOEL) to label expert organizations. When such divisions of labor exist within a given profession, I shall speak of an internal DOEL; this is a structure whose principal members are professionals of one type. When expert organizations involve several kinds of professionals, I shall call them mixed DOELs. The society-wide division

of labor between whole professions—a general division of labor of which any given mixed DOEL may repeat a part—I shall call the external DOEL. I have studied it in detail elsewhere (Abbott 1988). Here my concern is with internal and mixed DOELs. In what follows, the term refers to both of these unless I specifically limit it.⁵

We can consider the same set of issues about DOELs that we considered about commodified expertise. In terms of age, internal DOELs are quite young. The military and the clergy are old examples, to be sure, but the clergy was less a division of labor than an amalgamation of largely equivalent practitioners. Even the military has had a serious division of labor—one that goes beyond the simple hierarchy of command—only since the eighteenth century. Most of the familiar examples are much more recent. Hospitals with serious internal and mixed DOELs date from roughly the turn of the present century. The large law firm was invented by Paul Cravath in the same period, while Skidmore, Owings, and Merrill, the prototypical mega-design firm, was founded in 1936. Large accounting firms date from roughly the same era; their size has always paralleled that of their clients. True gigantism in internal DOELs is largely a postwar phenomenon, even in the United States; both England and France have explicitly forbidden it until very recently.

Nonetheless, internal DOELs have spread steadily throughout the expert world. Giant firms immediately seized the major French markets for legal services as soon as the government reduced its restrictions against lawyer combinations. And internal DOELs have generally grown in size as well; certainly firm size in law, medicine, architecture, and accounting has steadily risen over the last few decades. Finally, some expert occupations actually originated in complex divisions of labor (usually mixed DOELs)—teaching, social work, and librarianship, for example—and these have usually grown both larger and, to some extent, more bureaucratic. On the other hand, psychiatry, psychology, some sections of social work, and even the clergy have shown distinct anti-organizational tendencies through the postwar period; the trend is not absolute.

Internal and mixed DOELs generally encode knowledge not at the bottom of expert work, but rather across the whole of expert knowledge at once, with some emphasis on problems of extreme complexity or size. Large expert organizations often emerged to deal with the problems of large clients, problems often of a special complexity or scale. Auditing British Petroleum requires an immense team, as does designing a city like Oak Ridge, one of the Skidmore firm's early commissions. Hence, such DOELs tend to specialize in the largest, most elaborate expert services. It is striking that in law, accounting, and architecture the residual area of noncorporate practice generally consists of less prestigious, less remunerative work for individuals and small businesses. Occasionally, even that kind of work is organized in DOELs for efficiency, as in the case of (American) collection agencies, which

do work that used to fall to individual lawyers and agents. Hospitals, however, gain say these trends both in their origins and in their present functions. Historically, they were preexisting organizations taken over and transformed by doctors in the late nineteenth century; there is no connection with larger clients or especially complex problems. At present, hospitals provide services on a large scale, but still to individual clients. One might, however, more properly note that they have claimed the highly technical, highly capitalized part of medical practice. The slight tendency of DOELs to embody the "top" of expert practice thus refers to several types of "tops": the complex, the large-scale, the highly technical.⁶

The control of DOELs, although often complex, tends toward heteronomy. In the first move along this continuum, what began as internal DOELs become mixed; they come to include other professions in subordinate or, occasionally, collegial positions. The hospital is an early example, as are law and accounting firms increasingly today. Architectural firms are unusual in their interprofessional collegiality, which dates from very early in the modern history of the profession. Multiprofessionality also characterizes most expert social service organizations, many civil service bureaucracies, and even schools, although in none of these cases are the organizations the direct creations of the professions involved (i.e., internal DOELs that have become mixed), but rather vice versa; equivalent positions in mixed organizations served as foundations for professions.

Even where such mixed DOELs originate in internal ones, however, their control often passes from the originating profession, a process long evident in hospitals and startlingly evident today in the fission between accountants and consultants in the great accounting firms. The social and civil service bureaucracies have, of course, always been heteronomous. Only the lawyers have retained absolute control of their internal DOELs, a fact that may have led to the increasing tendency of their clients, the major corporations, to send work to their own heterogeneous legal departments that they had previously farmed out to the law firms. The ultimate control of mixed and even internal DOELs, then, is often out of professional hands.

Finally, the economic nature of internal and mixed DOELs is complex. Although traditionally partnerships in legal form, most DOELs are corporations in all but name. They require large economic resources, first because they must fund large subordinate support staffs and second because expert work increasingly requires commodified expertise in the guise of machines, databases, and other physical capital. In some cases the funds necessary to own and maintain these are internally produced, particularly if the coming of expensive commodity expertise has been gradual. But doctors and librarians long ago set another pattern that many professions have followed, allowing other organizations—in their cases nonprofit organizations and governments—to own the physical capital that their DOELs require.

Engineers represent the extreme of this process, because their internal DOELs generally exist completely within commercial corporations.

As a consequence of these various economic necessities, even relatively autonomous internal DOELs are extensively influenced by the forces and strains that generally affect corporations in society: costs of capital and labor and fluctuations in prices, demand, and competition. However these organizations begin, they become increasingly subject to economic rationality.

There is one central difference between expert commodities and expert organizations. The latter are capable of self-reproduction and development. These tasks are of course done by individual experts who work for the organizations. But those experts do not train and develop new experts and expertise in the formally free context of an autonomous professional organization or a university. Rather, they do so within an organization directly shaped by commercial activity. In terms of reproduction, then, the differences between organizations and professions are nearly as great as those between organizations and commodities. But in the first case the difference is of kind; in the second, although great, the difference is only of amount.

In summary, internal and mixed DOELs are a relatively recent but rapidly increasing social form, tending to absorb the more complex or large-scale applications of expert knowledge, although sometimes involving pure routine as well. These organizations turn into large quasi-corporations that often escape from the direct control of the originating experts and that involve substantial operating budgets and physical capital.

Expertise in People

There are a variety of ways expertise can reside in people. It can, first of all, be lifelong or temporary. Lifelong expertise characterizes slowly changing professions. Temporary expertise characterizes professions where knowledge change obsolesces individuals in a small fraction of their careers; hence the moves of aging academics and engineers into administration. Expertise in people can also be concentrated or diffused, residing sometimes in the few, sometimes in the many. Matchmaking, for example, has sometimes been expertized, sometimes not, while certain aspects of once-concentrated computer knowledge have recently seen massive democratization.

But the basic form of expert person in modern societies is the professional, an individual in (supposedly) lifelong, exclusive practice of a particular expertise. Professionalism is supported by a number of familiar institutional structures: professional associations, licensing, disciplinary procedures, arrangements for training, and so on.

Professionalism in this sense is about two hundred years old. Phenomena resembling it occurred under the old regime in France and Germany, but with distinctly civil-service orientation. The nineteenth-century English, in particular

the apothecaries and the solicitors, pioneered the version of professionalism usually considered definitive, in which a group of roughly equivalent practitioners associate in a corporate body that takes over self-regulation and self-reproduction. After a flirtation with anti-professionalism during the Jacksonian era, Americans generally copied the English form, adding to it an explicit connection to universities unduplicated in England until well after World War II. The relatively autonomous (some would say anarchic) Anglo-American version of professionalism never spread widely on the continent; there state recognition, state regulation, and, to some extent, state cooptation constituted central goals of professionalizing activity throughout the nineteenth and twentieth centuries. These goals came later in England and America.

Not only is professionalism fairly old, it has also spread quite steadily through the labor force since its inception. In its early years followed only by law, medicine, the clergy, and the military, the model of professionalism has since been adopted both as structural appearance and as cultural ideology by many occupations. While there is much disagreement about whether certain marginal groups "really are" professions, this very disagreement testifies to the enormous importance of professionalism as a social and cultural model for occupations.

Professionalism generally applies to the esoteric and intellectual aspects of expert knowledge. Groups lacking such knowledge have had difficulty successfully adopting professionalism (e.g., police as opposed to lawyers); many such (e.g., airplane pilots) have chosen unionization as an alternative to professionalization. Professions regularly shed quantities of routinized knowledge, either embedding it in commodities (e.g., handbooks of family medical practice or of tax advice) or delegating it to subordinate groups (e.g., architects having draftsmen prepare working drawings). In those professions whose knowledge is especially commodifiable (e.g., statistics, operations research), this process has gone to an extreme, with a relatively small core producing and supporting commodities used by a much larger periphery.⁸

Professionalism is generally, but not always, under the control of either the professionals as a corporate body or of an elite drawn from them. Positive examples are so common as to need no comment. The exceptions are more important to mention. Where the state is particularly strong, the government plays an authoritative role; in France, for example, professions' structures and, quite often, their prices are set by state agencies. Second, among those professionals (the majority, in fact) who work for heteronomous organizations, professionalism is strongly influenced by employers. The structure of engineering as a profession reflects this external control, as does the inability of "information professionals" to coalesce into something resembling a classical profession. (I shall discuss these issues extensively below.) Finally, professions can also come under the partial control of third parties, in those unusual cases (e.g., American medicine) where third parties provide most payment for services.

Economically, professionalism involves creating, reproducing, and if possible monopolizing a body of cultural capital—the expertise—from which rents can be extracted. Although professional knowledge is openly available (professions' textbooks can be found in libraries), its effective use comes only by a client's paying an expert to interpret and use it. To increase returns to this capital, professionals themselves have led in the creation of both commodified professional knowledge and of internal and mixed DOELs. As for ownership, the cultural capital of expertise belongs in some ultimate sense to the profession as a whole, although control of the income from it may be shared with the state or other powers. This ownership arises through the corporate profession's control of (1) entry to the corps of legitimate appliers of the knowledge and (2) the reproduction and development of that knowledge. The academic wings of professions—and in most countries the professions' alliance with the universities—thus play a central role in maintaining professionalism itself.

Above all, the professions are highly effective inventors of expertise and manufacturers of experts. Production and reproduction are their specialty. For example, the professions' central defense against commodification in the past has been to relegate commodified knowledge to subordinate groups while themselves creating and exploiting new services enabled by the commodification. Microfilm was once expected to destroy libraries; we would all own personal copies of the Library of Congress. But, in fact, it simply became a tool for making more material available—under librarian control—than ever before.

In summary, professionalism is about as old as commodification and has steadily spread through the labor force during the last two centuries. It mostly affects esoteric rather than routine expertise and involves the creation of a semi-monopoly of cultural capital. The immediate personal productivity of professionals is often extended by their use of commodification and internal or mixed DOELs.

INTERLUDE: OTHER FUNCTIONS

There are thus three basic ways to institutionalize expertise: in commodities, in organizations, and in professions. Commodification and professionalization are both relatively old, although the latter's major expansion antedates the former's. Bureaucratization in DOELs is more recent but rapidly expanding. Commodification affects relatively routine expertise, professionalization relatively esoteric expertise, and bureaucratization the broad range of expertise. Each of the three involves the creation of capital. Commodification involves physical capital and professionalization cultural capital. Bureaucratization uses both of these and adds what may be called organizational capital—a set of structural advantages that make application of expertise more efficient.

Each of these structural forms for expertise serves other kinds of functions besides the embodiment of expertise. As I noted before, the evolution of any given functional structure is shaped not only by those functions it is defined as serving in its legitimation claims (manifest functions), but also those unintentional functions it happens to serve willy-nilly (latent or secondary functions). It is, therefore, important to review the latter here.

The embodiment of expertise in expert commodities has the specific secondary effects of extending the range and productivity of individual experts and of creating thereby "indirect" rents on the cultural capital involved. Other by-product functions of commodification are the reduction of society's dependence on monopolistic experts and the possible democratization of expertise through the wide diffusion of the commodities. The creation of internal and mixed DOELs, by contrast, serves mainly to achieve economies of expert scale and thereby to enable the application of expertise to projects too large for individuals. It also facilitates more efficient processing of traditional expert work, increasing the net productivity of experts working in DOELs. Secondly, these organizations again help reduce social dependence on individual experts, although they do not democratize expertise, but rather exchange dependence on experts for dependence on organizations. Perhaps most importantly DOELs serve from the commercial world's point of view the purpose of opening the extensive profits of the expert world to direct commercial exploitation by nonexperts. The professions' record at maintaining control of commodified expertise is clearly better than their record of controlling DOELs: it is through DOELs that they are most vulnerable.

Professionalism itself has the obvious general function of embodying expertise in individual people and of guaranteeing a quality of service through various forms of institutional enforcement. It has the rather clear secondary function, well analyzed by Ben-David (1963) and Bledstein (1976), of social mobility. It provides relatively autonomous and relatively remunerative careers in an age dominated by large-scale organizational employment. The professions also serve a central cultural function of concretizing and symbolizing modern culture's fascination with technique and expertise.

Some of the secondary functions of these various embodiments of expertise seem relatively unimportant. The democratizing and independence functions of organizations and commodities seem likely to play a small role in their future. Although less accessible to certain geographic and social locations than to others, professionals are reasonably well-diffused throughout the United States and are forcibly dispersed in some other industrial countries. Because most potential clients have reasonable access to some form of professional services, there is little drive for democratization from lack of access. Moreover, although America has occasional bursts of anti-intellectualism, it has never shown a long-term distrust of experts, who on the contrary have become a larger and larger portion of the labor force. Fear of dependence on experts seems unlikely to

drive any changes in Europe either. Thus, while it is the case that moving expertise into organizations and, particularly, into commodities might have some impact by making expertise more widely diffused or by freeing parts of society from dependence on experts, there do not seem to be powerful forces seeking either that diffusion or that independence.

By contrast, both the economic functions of commodification and bureaucratization and the mobility functions of professionalism seem quite important. For both profit and mobility are enduring, major desires. To understand their impact, however, we must consider not only these secondary functions themselves but also the alternative structures available to serve them. A decline in these alternatives may make one or another of these secondary functions suddenly more important. Consider the economic functions. Professionalism sets a group and its profits apart from the rest of society, while commodification and bureaucratization allow anyone with certain economic resources immediate access to the profits of expertise. Therefore, were other opportunities for profits to decline, commercial interests would have new reason to invade the expert world. This may in fact be the case: manufacturing's real after-tax profits have recently stagnated while service profits are steadily increasing (*Statistical Abstract of the United States* 1986, p. 515; *Historical Statistics* 1970, p. 682).

Similarly, the chief secondary function of professionalism—social mobility—seems more important than ever. On all indicators of work independence, the professions constitute the major holdout against organizational dominance of the labor force. They have flexible hours and low unemployment rates. They are also the last major area of self-employment. And of course their monetary and prestige rewards are high. While welfare state supports and the strong benefit packages of major corporations do provide a security unavailable to nineteenth-century nonprofessional employees, professional employment still retains its relative attractiveness both for its mobility potential and for its overwhelmingly greater security.⁹

Overall, then, changes in exogenous structures are emphasizing the secondary importance of both professionalism to individuals and of expertise-based profits to commercial interests. The stage seems set for confrontation.

THE FUTURE OF PROFESSIONS

Before assembling these pieces into a full functional argument, I shall briefly consider two standard apocalyptic arguments about the future of professions. In the view of the technology prophets, professions will be largely destroyed by the commodification of expertise in expert systems. In the view of radical social theorists, an already-perceived process of proletarianization will press on to its logical conclusion, the reduction of professionals to a slightly glorified white-collar status.

The commodification thesis assumes an extreme generality for artificial intelligence. It holds that there is only one general form of expert reasoning. All that varies is the lexicon of concepts and the specific inferences and decisions that follow from it. Proponents can point to the clear success of middle-level AI programs in medicine, law, and a variety of other areas.

The central problem with the commodification thesis is that it has been wrong so many times before. In most of those cases, the issue was not of a commodity capable of all forms of inference, to be sure. But commodification is very old and fear that it would obliterate professions is equally so. Microfilm was going to make the library obsolete. Simplified tax forms were going to put accountants out of business, as do-it-yourself legal forms were to obliterate the lawyers. Canned programs would leave statisticians nothing to do. One has only to recite these examples to see why the commodification thesis is wrong. Every new commodity simply creates a new market for professional services, either through new desires (microfilm enabled peripheral scholars easier access to major materials; legal citation indexes enabled pedestrian scholars to look Maillandisque) or through botched use (statisticians make a living fixing up others' misapplication of their commodities).

Moreover, commodification has often been led by the professions themselves. Even AI programs must be supported, developed, and extended with the assistance of professionals. Professionals have—in the cases of statistics and to some extent operations research—shown their ability to maintain control over a large area served mostly by commodities rather than by individual experts, a pattern we might call elite professionalism. It is true that professions in this situation do not have the familiar look of mass professions like accounting or medicine; they are constituted of relatively small and heavily academic elites with large and permeable peripheries. But ultimately commodification has never killed professions. It reshapes, but does not remove.

The proletarianization thesis has better support. The development and spread of the large expert firm clearly illustrates the potentiality for organizational dominance. Although expert DOELs first arose in the United States, restrictions against salaried work by professionals and against gigantism are now falling rapidly in Europe. While the DOELs were first created by the professions themselves, it is now clear that in them neither work nor career follows the collegial patterns of free professionalism, except in the loose sense. Most actual professional service in such organizations is provided by relatively young workers; older workers dominate the organizations from the administrative positions to which they migrate. The massive investments required continually move the largest firms and hospitals toward an explicitly corporate basis. One can easily see in these developments the eventual proletarianization of professionals.

There are, however, serious problems with the proletarianization thesis. The first is that the clearest and oldest case of organization-dominated professionalism—engineering—questions the thesis distinctly. It is true that engineers do not command the immense incomes of lawyers and doctors. But this partly reflects engineering's inclusion of varied levels (from B.S. to Ph.D.) as it does the fact that engineers in management are more likely to change occupational identification than are doctors or lawyers in similar situations. It is true as well that engineers are much less often self-employed than are lawyers and doctors (although the disparity is lessening); even in the 1890s only about 10% of engineers were self-employed. But the central facts are that many engineers advance into operational management and that engineers still stand quite high in the overall income distribution, even though engineering skills have been steadily commodified throughout the last century and engineering has been one of the fastest growing professions. To be sure, many or most engineers feel their skills are underutilized, but so also, of course, do many or most lawyers and doctors. In short, engineers have status, income, and reasonably strong upward mobility prospects; to call them proletarianized is simply to redefine the word.¹⁰

What is different about engineering is its shape as a social structure. It is more permeable than medicine or law. It is subdivided into numerous cross-cutting specialty groups. Many of its practitioners hope and expect to leave it for better things. But like medicine and law, it is anchored in specialized schools and curricula, possesses a broad and common professional culture, and supports a number of powerful and effective umbrella associations. To say that engineering is "not really a profession" is simply to define an important question out of existence. Engineering testifies that professionalism—in the broad sense of institutionalizing expertise in individuals rather than in organizational structure itself—survives reasonably well within powerful organizations. That it takes new forms within those organizations is, then, the trend that must be understood.

The changes are in fact much broader than the example of engineering makes one think. It is quite generally true that employed professionals' experience of professionalism is not that of nineteenth century solo professionals, who were utterly alone and autonomous, joined to colleagues only by occasional consulting and even less occasional conventions. But indeed no twentieth century professional—solo or salaried—has that experience; professionalism itself has changed. To see that change as chiefly resulting from the surrender of professional autonomy to organizations is to miss the other shifts: from small to large (current professions average about ten times their nineteenth century numbers), from a legitimacy based on character to a legitimacy based on technique, from a free-standing structure to one that is university-based. The bureaucratizing of professionals is only one aspect of the overall transformation of professionalism.¹¹

The proletarianization thesis has thus proven wrong, or at least obscurantist, in the past. Unless there are substantial changes in the forces shaping expertise, there is little reason to expect it to hold in the future.

But the minor premise here is important. There may be substantial changes in the environing forces that shape the institutionalization of expertise. To consider this issue, however, is to turn from the realm of simplistic models to an intricate balance of functions. Consider that balance of functions as laid out in my argument thus far. The four major functions involving expertise are as follows.

1. Institutionalizing expertise, possibly at a particular level
2. Reproducing and developing expertise
3. Making the application of expertise more efficient
4. Generating profits—for certain individuals or groups and in certain amounts

I have also mentioned some constraints, in particular constraints on (1) the size of job that is possible under each expertise regime and (2) the extent of ownership of the physical capital of expert work that is possible under each expertise regime. Finally, I have noted some secondary functions and exogenous trends that might be expected to affect the situation.

A number of predictions follow at once from these conditions. First, there will always have to be some individual experts in every field, because commodity expertise must be developed with experts' assistance and because the application of expert knowledge in organizations itself requires some form of expert involvement. This surviving group may well be substantially smaller than existing mass professions, which average, in the United States at present, several hundred thousand members. But a central corps will remain necessary.

It is clear that the second source of professionalism's power lies in reproduction and development, where, beyond this necessary threshold, its hold is not so strong. There is at present little likelihood that AI will become capable of developing new expertise, but organizations are gradually becoming the sites of more and more development of expertise, in preference to the profession-dominated universities that have long served this function. The recent trend toward hybridized university/industrial research, the move of biotechnology into commercial companies, and the removal of direct government subsidies for professional research all indicate that development of expertise in those areas of professional work susceptible of commercial application is moving more and more into organizations. A similar situation obtains in reproduction. Expert commodities can be infinitely reproduced, but may require some assistance in application. On the other hand, organizations have taken over substantial reproduction functions; American corporations spend on staff training an amount in the same order of magnitude as the

national professional education budget. Certain firms, particularly those in information services, are aggressively pursuing the internalization of training, a direct threat to professionalism. In commercially valuable areas, then, organizations may wrest important parts of reproduction and development from the professions.

Expansion of organizations will also occur in areas governed by strong constraints. Areas of work where the characteristic tasks are large and complex and require immense resources in commodified expertise will be areas for organizational expansion. The interim solution of the professions—getting the state or nonprofit organizations to own the capital with equal access for all professionals, as in medicine—will fall apart. Pressures on it come from outside corporations looking for profits and from insiders incorporating to limit outsider access to those profits. Certainly in the big-job areas—design of large buildings, audit of large corporations, law services for major organizations—there is little room for old-style mass associational professionalism, and, increasingly, even for the relatively small internal DOELs that did such work seventy-five years ago. At the other end of the scale, while internal DOELs did accomplish some rationalizing of small-scale work, there is so much of it available—local school design, small business audit, personal legal services, local graphic arts, and so on—that there remains a substantial field for mass professionalism in the old pattern. Also in low-commodity, small-scale areas of expertise like psychotherapy and counseling there is little reason for organizational takeover, because the work is heavily labor-intensive and there is little room for rationalization through organization. Professionalism will retain its greatest strength in such areas: Medicine, where the work is small-intensive in the sense of being patient-by-patient, but increasingly commodity-intensive, will provide an interesting borderline case. It is striking that, in accordance with my analysis, it was the rise in medical profitability occasioned by federal funding that drew commercial organizations into health care.

Where organizations do expand, we can expect a pattern for expert workers like that in engineering. There will still be identifiable experts, with ability to retain their individual cultural capital. But they will be organized more loosely, both in terms of their own occupational identity and in terms of their professional power as an organized group. Without question, the most interesting group to watch in this regard will be the information experts presently emerging on the boundaries between information science, librarianship, computer operations, and accounting.

A number of cross-cutting factors need to be mentioned. First, the effect of commodification has been historically variable. On the one hand, the creation of expert commodities often creates a need for new experts equal to or exceeding the need absorbed by the commodities. Reference librarians have not disappeared with the arrival of on-line databases; now they counsel users on how to use them effectively. On the other hand, commodification can be

somewhat democratic, as is shown by personal computers, which have facilitated a new generation of cottage industry. There the trend has been to diffuse some forms of expertise altogether, away from either professionals or organizations.

Second, the social mobility functions of professionalism will clearly aid its survival. At the cultural level, these functions virtually guarantee survival. Whatever happens to professions as actual social structures, they will certainly survive as names and images because the social mobility they facilitate and represent is so central to modern societies and their cultures. Thus it is paradoxically fitting that nineteenth century professionals would not recognize their current successors. For while virtually all professionals today lack the independence of their predecessors, most still sense themselves as more independent than other workers. The word "professionalism" still does and will distinguish groups, if not by exactly the same content as before.

But even at the social structural level, professionalism will undoubtedly survive. As I have argued, there are substantial work areas in the system of professions that are of little interest to organizations because of unprofitability or unfavorable conditions in terms of commodifiability and job-size. In those areas, professionalism in its older form will endure. More importantly, professionalism has been immensely fecund. It has often seemed threatened by employment or commodification, yet again and again revives. Organizations themselves spawn new professions (social work) as do new commodities (radio engineers). New forms of expertise are continually emerging and groups seem perpetually eager to form new professions. That many fail is no truer now than it was a century ago; where are the electrotherapists today?¹²

Driving this fecundity is, in fact, the social mobility function of professionalism. Schumpeter once argued that entrepreneurialism was dying, done in by its own success in inventing the large corporation. But as Ben-David (1963) responded, entrepreneurialism also died because many would-be entrepreneurs entered professions instead. Professionalism provides many of the benefits of entrepreneurialism without its disadvantages. It provides a secure and independent career. It is far less risky than entrepreneurialism, even when the professional is an entrepreneurial expert founding a new field. To be sure, the maximum possible rewards are somewhat less than in business entrepreneurship, but they are still very large. Particularly in an age when business entrepreneurship itself is threatened by the discipline and organization of the large firm, professional life may seem a more attractive form of mobility, just as it is often a more secure guarantee of independence. There is no question that this vital social mobility function would preserve professionalism even were organizations and commodities to become the dominant modern institutionalizations of expertise.

OCCUPATIONAL COHERENCE UNDER ORGANIZATIONAL DOMINANCE

I have noted throughout that the era of mass professionalism—in which the basic unit of expertise is an independent individual with lifelong expertise—is waning. I have also suggested some variables that make this process move faster in certain areas of expert work than others. In those areas, new forms of professionalism reflect increasing dominance of commodities or organizations. In commodity dominance, I have discussed the phenomenon of elite professionalism, in which a small group continues to produce and support an extensive commodification of its knowledge. In organizational dominance, a case I shall follow Larson (1977) in calling bureaucratic professionalism, I have repeatedly used the example of engineering. Engineering has been more loosely structured than the classical associational professions; it admits many levels of workers, it has high turnover, its specialty associations dominate its general ones, and so on. For Larson, as for a preceding generation of analysts of engineering, this loose structure meant failure: failure to achieve “true professionalism” or “effective monopoly” depending on one’s political beliefs. But as I have repeatedly emphasized, engineering’s failure to achieve a medicine-like dominance should not blind us to its inherent interest as an expert occupation. The central question about bureaucratic professionalism concerns precisely the loose structure of groups like engineering.

The question raised by that loose structure is simple: in what sense can engineering really be considered an occupation? Does engineering’s loose structure mean that it ceases being a collective actor? If so, then our model of occupational politics must move either to an individual level or to a class level (see, e.g., Zussman 1985). Moreover, if engineering and other occupations under organizational dominance are not really collectively acting occupations, then my own argument that the overall division of expert labor arises through the collective actions of occupations fails, and we are left with no effective explanation of the external division of expert labor.

It should be clear that by the term occupation I mean something beyond a mere category of workers. The Census calls many such categories occupations, but this does not make them social groups in the technical sense: groups whose members take account of each other’s actions, intents, and beliefs, groups that act as units, groups that cohere. The question about engineering and other bureaucratic professions is the degree to which their loose structure changes them from occupations to mere categories. In this closing section, I shall sketch ways of conceiving and measuring motion along this continuum as well as variables that seem to affect it. The discussion will set out a framework for analyzing bureaucratic professionalism and more broadly, for analyzing occupational coalescence in general.

We might begin by distinguishing two general ways of approaching the coherence of occupations: first through the resemblance of the members and second through the structural properties that bind those members together. Resemblance ties an occupation together by giving it a common body of experiences, a common culture, a common set of interests. These properties are common to individual workers, and hence resemblance is basically a micro, individual-level issue. Structural properties are by contrast at the macrolevel. Among them are the types of interconnection between workers, the degree of formal occupational organization, and the occupation’s relation to market and employers. The two sets of properties are not antithetical, as they tend to be in Durkheim’s version (mechanical and organic solidarity). Rather, each is necessary and neither is sufficient to create occupational solidarity.

Resemblance begins, as the Census recognizes, with similar type of work. Occupations are focused by a common body of daily practices. But there are many other sorts of resemblance involved. First, common career patterns establish a common set of experiences over the occupational life cycle and often begin with standard training, either formal or on-the-job. While often much of the formal learning is irrelevant to practice (particularly in the professions), it plays a central role in establishing worker resemblance through a common occupational culture. Second, resemblance arises in the common class or gender origins of recruits, origins which are substantially restricted in most occupations. Many professions have historically relied on upper middle-class male recruitment to provide important elements of occupational solidarity, although there are of course female professions (social work, nursing), ethnic professions (rabbits), and so on. In all these cases, recruit commonalities help provide occupational coalescence. Third, commonalities also arise in patterns of relations to employers. Occupations whose members have widely varying relations to their employers will be less coherent than those having only one or a few such relations. Common relational patterns facilitate coherence.

The common characteristics of individual workers can be seen as so many micro variables affecting the possibility of occupation formation: the longer the common career pattern, the more coherent an occupation will be; the greater the amount of common training, the more coherent an occupation will be; the more homogeneous an occupation’s recruits, the more coherent it will be; the more facilitative an occupation’s relation to its employers, the more coherent it will be. We can also think of micro ways of measuring occupational coherence itself. The obvious measures concern the degree to which each individual identifies with the occupation: whether s/he expects to remain in the occupation, whether s/he orients more to occupation (puddler) than to industry (steelworker), and so on. On this view, membership in occupational organizations (unions, associations) is a rationally-chosen expression of individual values, and occupational coherence, in essence, is a matter of how many people in a given category of workers make that choice positively. The

micro approach thus entails not only a set of variables affecting coalescence, but also a way of construing that coalescence.

A contrasting view looks at occupational solidarity at the macrolevel. Such an approach considers similarity of individuals less important than the structure of relations between individuals. Like resemblance, however, that structure arises in many different ways. It arises first in the degree of interconnection between members of the occupation. These connections can come, for example, through work in common worksites. Workers in common worksites have both interests in common (a micro property) and more chances for interaction and group formation (a macro property). To be sure, differentiation within the worksite may work against this (as when one member supervises another), but the net effect may be positive. Interconnection can also arise through interdependent subtypes of work, through the division of labor itself. We often think of the division of labor as an imposition dividing occupations. But division of labor also creates a solidarity born of necessity, as Durkheim observed. Finally, interconnection may arise through career patterns that bind different sectors of an occupation together. Many professions have a characteristic career that begins with formal training in one setting, continues with on-the-job training in another, then goes on to practice in several more. This mobility ties the various professional segments together.

Just as the various common properties of workers give rise to a solidarity of resemblance, interconnection gives rise to a solidarity of structure. But there are other sources for this solidarity besides interconnection. One is the character of the common work. Members of an occupation have a collective interest in preventing the commodification of its skills, and indeed an occupation will be the more coherent the less easily its skills can be commodified. If its skills are highly portable (in the sense of moving with the worker), occupational coherence is again strengthened. In one sense this is paradoxical: workers who are highly substitutable for each other in specialized areas would be expected to be fierce competitors. But in fact this competition seems to have been muted, and the solidarity effects—which arise through the interconnections created by mobile workers—seem to dominate.

Another source of solidarity (and unsolidarity) lies in the relation of workers to employers. It is this factor that historically differentiates engineering from many other professions. Clearly, the more independent occupations are of their employers, the more easily they can coalesce into acting groups. Independence lies in many things: in occupationally-established patterns for careers, in free-standing training, in an occupational hierarchy independent of imposed organizational hierarchies. All these (and many other) aspects of independence affect occupations' ability to become effective social groups.

Just as we measure coherence at the microlevel by individual loyalty, we can measure it at the macrolevel by the extent of formal structure, both across the occupation and within its subsegments. Important measures are the number

of occupational associations and unions, the percentage of the occupation involved in associations and their meetings (surprisingly low even in such professions as medicine) the extent and effect of licensing laws, ethics codes, and other forms of autonomously-administered disciplinary procedures, the distribution of newsletters, journals, and other occupational communications, and so on. We know very few of these facts about even the well-studied professions. Yet they are the foundation of a macrolevel judgment of occupational coalescence.

A strong point of the macroview of occupational solidarity is its explicit recognition of solidarity's self-reproducing character. Two forces undergird this character. First, on the Michelsian assumption that occupations are in the hands of powerful elites, power permits its own reproduction, particularly through control of intraoccupational stratification (e.g., seniority requirements in union systems, credential rankings in professions) and other forms of internal structure. The medieval guilds were only the most spectacular version of this control, a control that continues in varying forms to the present. (It is tempting to hypothesize that oligarchical occupations will better retain their solidarity, *ceteris paribus*.) Second, strong macro solidarity permits an occupation to more easily establish a common culture and structure: it is the foundation of common training. Too, it generates the cultural practices that maintain itself; the formal rituals of the guilds, the paradises of the early nineteenth-century artisans, the self-congratulatory histories of the mid-twentieth-century professions. Macro solidarity is in this sense a cause of itself; it has great inertia. It is because this inertia cannot be explained at the microlevel that one cannot regard the macro properties of occupations as simply reducing to aggregates of individual commonalities among the members.

This preliminary outline of the foundations of occupational solidarity indicates that the future structure of professions under organizational dominance is by no means clear. We can identify the variables that may have brought engineering to its current place in the occupational structure, but it is not clear how those variables will affect other occupations. As I earlier stated, we know very few of these facts about even the best-studied of professions; scholars on the American legal profession, for example, are just now beginning to assess rates of participation in its organizational life over the last century. With so little information about the past, we are in no position to extrapolate to the future.

We can, however, say that these variables—the variables of solidarity and coalescence—will be the central ones in determining the future shape of expertise in those areas where my analysis predicts organizational dominance of expertise. If occupations can really cohere under the new regime, the same politics of occupations that established earlier expert divisions of labor will continue to determine those DOELs, albeit in the new arena of organizations. If not, then half-baked versions of proletarianization are possible.

My predictions are thus diverse. Some professions will remain basically as before, others will change dramatically, depending on the competition of commodities, organizations, and, of course, other professions. Undoubtedly, the complex interaction of factors makes it impossible to predict individual cases very well. But as I stated earlier, that is not the point of thinking about the future; rather we think about the future to grasp the "significance of what has taken place." The significance of what has taken place is that modern organizational structure makes our whole category of occupations problematic. We can no longer assume that a name represents a coherent group of people. The professions merely make this more clear than other occupations because some of them survive in their earlier, highly coherent forms. What the future of professions tells us is that our real question concerns the current variety of occupational coherence.

NOTES

1. I make these disclaimers not hoping to redress failures in the argument, but simply to recognize its character openly. It is better that I indicate at the outset which aspects of my argument concern endogenous facts and theory and which concern such exogenous matters as the fixities of language and the impossibility of definition. For problems in the former, I am fully responsible. For the latter inescapable difficulties, I am not.
2. The factors that make expertise more or less susceptible to professionalization, that determine the characteristic size of an area of expertise, and that enable changes in the body of expertise controlled by given professions are considered in Abbott (1988, chap. 4). For me the defining characteristic of professionalizable expertise is that contests over what group will exercise it are conducted in abstract, theoretical terms.
3. It thus ultimately makes little difference that I have chosen the rhetoric of functionalism to frame this essay. In common with the general functional tradition, I am here deliberately treating broad social intentions as functions. They are usually called manifest functions. Some tasks are carried out by social structures without any real intention; their performance is maintained by more or less implicit feedback loops. These are usually called latent or secondary functions. A good example is the function of universities in preventing unemployment by keeping millions of students out of the full-time labor force. Some writers (e.g., Elster 1983) deny both kinds of functions altogether as mere appearances developed by regularities among rational choices by individual social actors. Unfortunately, rational action theory in the formal sense is hopelessly cumbersome for addressing the topic I have in mind, a quality evinced all too clearly by Elster's work on the subject of technical change. So I shall proceed with the functional rhetoric, assuming it to be justified at least on nominalist grounds. Regarding expertise as in some sense "needing" to be organized into a set of legitimated social structures is an analytical and rhetorical convenience, one that does not require any particular ontological credo.
4. I write this essay shortly after completing a book on the general subject of professions in modern society (Abbott 1988). Although the main arguments presented here do not appear there, much of the evidence and secondary argument comes directly from that book. I have omitted extensive citation for this material. The present essay is basically theoretical and evidence more extensive than could possibly be given here is easily found in the book. Rather than belabor the reader with self-citation, I shall give here a few general references to my discussions in the book. Commodification of knowledge is discussed in chapter 7, section 1. Bureaucratization within

professions is discussed in chapter 5 section 3 and multiprofessional organizations in chapter 6, section 2. Professionalism as an occupational form is discussed throughout, but particularly pertinent discussions are chapter 2, section 5, on academic knowledge, and chapter 3, section 3, on internal organization.

5. Division of labor and bureaucratization are not, of course, the same thing. However, the one is so closely accompanied by the other in the process of creating large expert organizations that I have taken the risk of using the shorter and more convenient term to refer to the whole phenomenon. Note that while internal and mixed DOELs are organizations, the external DOEL is not.

6. The various scales on which expert knowledge and problems may be rated—from complex to routine, from large-scale to small-scale, from technical to humanistic—are clearly subjects for extensive research, as are the various interrelations between these scales. Variations in them clearly affect the way the expertise involved is institutionalized.

7. One reader of this paper has questioned my speaking of expertise in people rather than in occupations. My reasons for this usage are simple. As the opening paragraph of this section suggests, there are many forms of expertise that individual people possess and exercise that do not involve occupational organization. There is an occupation of cooks, for example, but a great deal of cooking expertise (maybe a little less today than formerly) exists in the general public as individuals. So does a lot of temporary expertise about mortgages and wiring quality (forgotten as soon as one takes the plunge and purchases a particular dwelling). Thus, if I listed commodities, organizations, and occupations as my three embodiments of expertise, I would have a large residual of other forms of personal expertise. But since the major factors for the future of professions lie more in their character of personal expertise than in their specialized character of occupations, I prefer to treat professionalism as the chief organized version of the broader category of expertise in people. This is not to belittle the organizational structure of professions, about which I have written much elsewhere and which certainly plays its part in determining the future of professions. But I think that particularly in the Anglo-American context, the really central qualities of professionalism lie in the expert's being an individual, a person.

8. Unionization and professionalism have historically been mutually exclusive in the United States and England, but not in France. At present, of course, the barriers are breaking, although mainly in the United States and mainly in the lower ranks of relatively large professions. Teachers, social workers, some engineers, even some doctors have unionized; typically those involved are organizationally-employed professionals. There is still nothing in the United States resembling the French situation; a Communist doctors' union is unthinkable here. Much of the barrier between the two forms reflects professionalism's historical heritage as organizing large groups of identical, independent, individual practitioners, a pattern I have called mass associational professionalism and that characterizes the Anglo-American professions.

9. One reader has questioned my assertion of the relative security of professional employment. There are a number of studies of middle class, proto-white-collar employees of large organizations in early capitalism, most indicating quite substantial turnover in these positions. Certainly the rates of bankruptcy make the insecurities of entrepreneurs painfully obvious. For the professions, however, there is very little solid evidence on career retention, largely, I think, because it has been assumed to be virtually perfect, a fact that has only recently come into serious question. However, such evidence as there is indicates substantially more security in professional than in alternative careers. The whole issue awaits a serious (and probably quantitative) comparative study of careers, something seldom attempted for the present day, much less for the past.

10. Some versions of the proletarianization concept focus less on these kinds of rewards than on the worker's control of the ultimate use of his or her work. For all our wistful admiration for artisanal labor, only a tiny fraction of the modern labor force really enjoys this control, even essays like this get mauled (sometimes) by editors and misused (not to mention ignored) by readers. By far the majority of modern professionals lack real control of their work; lawyers in private

practice are a surprising but conspicuous example. This lack of complete control, however, does not make professionals the equivalent of blue-collar laborers, which a serious use of the term proletarianization implies. To believe that modern salaried doctors and lawyers occupy "proletarian" positions in that sense is to live in a phantasy. The term has some analogical value, but is as inappropriate as ever as a general analytic term for the middle levels of employment.

11. Professions thus illustrate a rather common situation where the word denoting a social phenomenon does not change while the character of the phenomenon does. Late twentieth century professionalism is qualitatively different from late nineteenth century professionalism. Yet, in a sense, the relative distinction—the distinction between professionals and the rest of the labor force—remains much the same. Professionals are still more autonomous, better paid, and so on. The professional/nonprofessional distinction may then be a Levi-Straussian opposition that is unlikely ever to be eradicated, even though its contents may shift sharply.

12. The perpetual turnover and transformation of professions, their ability (and sometimes their curious inability) to survive and adapt in a complex and shifting environment, are central themes of my earlier work.

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