

The Social Sources of Educational Credentialism: Status Cultures, Labor Markets, and Organizations

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The expansion of access to higher education and the proliferation of formal degree requirements for entry to employment have been enduring trends over the past century. This article reviews the contested development and promise of the Weberian theory of educational credentialism, which views competition for credentials as a primary determinant of modern stratification systems. The key issues that are elaborated include the relationship of educational expansion to economic growth, the relative importance of technical skills versus occupational status-group cultures in degrees and recruitment, the significance of the formalization of degrees, and the peculiar dynamics of bureaucratic and professional credential markets. The future trajectory of credentialism is assessed in light of potential policy reforms, market crises, and state interventions.

More Americans are enrolled in higher education today than ever before, and their numbers are growing. Overall yearly enrollments increased 20 percent, from 12.2 million in 1985 to 14.6 million in 1998. By 2010, enrollments are projected to increase another 20 percent, with equal rates of increase in two-year and four-year institutions. From 1985 to 1998, the number of associate and bachelor's degrees granted also increased 20 percent, and master's and doctoral degrees granted increased 49 percent and 41 percent, respectively (National Center for Education Statistics 2000). Over the past century, educational requirements for entry to jobs have spread to a wide spectrum of occupations, in step with advances in educational attainment.

The dominant U.S. ideology holds that this educational expansion and heighten-

ing of occupational entry requirements is necessary because of the increasingly complex demands of workplaces, that is, the need for skilled labor. The popular wisdom among the few critics of these trends of expansion is that extensive links between schooling and vocational pursuits are neither necessary nor desirable because they lead to diminished academic inclinations among students who pursue degrees purely for their instrumental, "sheepskin" effects in job hunting.

These two positions are not the only viable explanations of the matter at hand, for there are more palpable sociopolitical explanations of the proliferation of educational degrees. This article examines the development and current direction of *credentialing theory* as an alternative perspective that sees the expansion of educational degrees as the growth of culturally based,

stratifying entry barriers to occupations and organizations.¹ This “credentialism” argument, which originated in Max Weber’s sociology, has been widely misunderstood and conflated with other perspectives on education-based recruitment; hence, clarification of the theory is timely.²

Educational credentialing theory and research have cast serious doubts on central assumptions in individualistic human capital theories and capitalist control-based Marxian structuralist theories of education. Eschewing notions that schools are merely meritocratic institutions that sort individuals and certify their objective technical skills (their productive capacities) or tools of a capitalist elite, credentialing theorists argue that educational certification is a historical legitimization of advantages that empower degree holders in occupational and organizational recruitment. Credential requirements for jobs are less concerned with concrete work skills than with demanding that recruits hold similar, school-taught cultural dispositions to incumbents of positions. These similarities reduce a variety of organizational recruitment uncertainties. Occupational monopolies are upheld by popular beliefs that mask cultural domination under ideologies of individual merit and technical competence.

The key elements in credentialing theory are summarized in the following propositions:

1. The content and occupational significance of credentials are more cultural and exclusionary than technical and efficacious. Correspondingly, degree thresholds are more important in credentialed labor markets than are years of schooling or technical knowledge.
2. The formality of credentials (i.e., the information in the degree itself) is an abstraction from the actual substantive knowledge of degree holders that delimits which authorities may question the substantive competence of degree holders. Thus, formal qualifications are linked to positional power in jobs.
3. Credentials are (a) monopolized by competing occupational status groups as exclusionary, cultural entry barriers to positions and (b) used by hiring parties as measures of candidates’ trustworthiness in positions that embody discretionary powers. Professional

and bureaucratic labor markets are end points on a continuum of credential usage from (a) to (b), respectively.

4. Historical credential inflation at the top of credentialing hierarchies drives educational expansion. Credentialing crises may occur in credential markets, and states may be more or less involved in the regulation of credential markets and crises.

I expand on these essential points as I proceed with this article. The origins and development of credentialing theory within the intellectual context of competitor perspectives serve as a useful point of departure.

INTELLECTUAL LINEAGE OF THE PROBLEM

The classical origins of credentialing theory in Weber’s work laid fallow for nearly half a century. Once it was resurrected, credentialing theory was cast against prevailing individualistic, economic accounts of education and jobs as a decidedly social and political theory. Credentialism also contrasts with Marxian structuralist arguments that assume thoroughgoing capitalist control of schools and degree holders because credentialing theorists grant considerable autonomy to noncapitalist actors in schools, labor markets, and the government.

Weber’s Sociology of Education

The taproot of credentialing theory lies in Weber’s stratification analysis, specifically Weber’s treatment of education-based status-group domination. In the programmatic statement for this perspective, Weber (1922/1978:1000) observed:

The elaboration of diplomas from universities, business and engineering colleges, and the universal clamor for the creation of further educational certificates in all fields serve the formation of a privileged stratum in bureaus and in offices [that serves to] limit the supply of candidates for these positions and to monopolize them for the holders of educational patents.

Weber’s (1916/1951) key work on the cultural monopolization of occupations was his *Religion*

of China, which showed how the Confucian examination system granted administrative offices on the basis of the mastery of esoteric texts, rather than on technical competence. The sociology of religion and intellectuals provided Weber with a general model for understanding formal cultural production (Collins 1998; Sadri 1992). For Weber (1920-21/1958), the testing rituals that gained one admittance to sectarian religious communities and the various forms of economic and political credit they afforded were predecessors to the formalized educational credential requirements for employment in the modern era. Formal educational claims of competence (whether based on technical or charismatic criteria) were inseparable from jurisdictional issues (politics) of employment, that is, from positional monopolies that were based on substantively unassailable cultural qualifications. This point remains a central tenet of credentialing theory today and receives further attention later in this article.

In Weber's view, educational credentials were essentially cultural-political constructions of competence and organizational loyalty that bore little relationship to the technical demands of modern work. "Educational patents" institutionalized status honor as a sometimes intentional, other times coincidental, result of the various actions of self-interested occupational groups (e.g., physicians or journalists), organizational recruiters (e.g., the higher civil service), school authorities, and governmental overseers. The relative independence of these groups in shaping the content and consequences of education stands in marked contrast to Marxian structuralist theories of education that ascribe a preponderant role to capitalists, who, with minimal opposition, manipulate the educational system to their ideological and economic advantage. A brief examination of the interface of this Marxian vision with Weberian credentialism is warranted before I move on to the challenges of more conservative, human capital-based economic theories.

Marxian Analyses of Schooling, Work, and Credentials

Marxian scholars have striven to show how corporate capitalists who control the economic market for material production also

control other economic markets (e.g., labor markets and financial markets), dominate cultural production, and monopolize politics. Early socialists, such as Veblen (1918/1957) and Sinclair (1922), set the tone for subsequent Marxian critiques of education by decrying capitalist ownership and control of universities through trustees who were members of the business elite.

Following Gramsci's (1928/1971) ideas about schools as centers for the production of cultural hegemony, more recent Marxian arguments have held that capitalists manipulate the content of schooling to create docility in the labor force. Here, corporate philanthropy is seen as a key vehicle in the implementation of Taylorism and related capitalist ideologies in schools (Arnove 1980; Barrow 1990; Callahan 1962). Bowles and Gintis's *Schooling in Capitalist America* (1976) and Apple's *Education and Power* (1982) each explored capitalists' infiltration of education and their forging of a match between exploitative school and work cultures.³ Willis's (1977) study of British working-class schooling examined the same matter, albeit with working-class students giving facile "resistance" to capitalist educational culture.

In Marxian perspectives, compulsory education and neocompulsory credential requirements for work merely serve to pacify the masses (Hogan 1996). The "deskilling" of jobs through technical innovations proletarianizes workers, leaving education void of its true historical function as a repository of marketable skills and expertise for workers (Braverman 1974). Education now merely encapsulates workers in capitalist ideology, and credentials are meaningless to workers' own interests.

Weberian credentialing theory counters this line of reasoning by arguing that educational degrees (particularly higher degrees) are indeed power phenomena, but that they are manipulated by a variety of occupational groups and educators, often to the detriment of capitalists' desires (e.g., where degrees limit labor market supply and drive up the price of labor or give workers greater control over the politics of work itself). There has been an uneasy tension between the Marxian and Weberian camps with regard to school and work. The evidence for Marxian hypothe-

ses of cultural control appears much stronger at lower levels of credentialing systems, where the perceived necessity of degrees for occupational placement actually is the weakest. Weberian perspectives offer more plausible explanations with regard to higher degrees and the inflation of credentials as a whole. Sociologists' understanding of the interplay between spiraling credential sequences and capitalist influence over the content of education at lower rungs of credential ladders is still vague and deserves more serious investigation. Marxian perspectives at least admonish that educational institutions are objects of conflict that are implicated in the maintenance of social inequalities, which places them in closer proximity to Weberian interpretations than to conservative economic theories that hardly address the power dimensions of educational growth.

Enter the Human Capital Economists

Weber's early message about credential stratification went largely unheeded by sociologists of the first half of the 20th century. Structural-functional theories of the midcentury assumed a benign, harmonious, and ever more complex interdependence between education and the economy, in which expanding education provided job skills for increasing technical sophistication in employment. Meanwhile, microeconomic theory developed a complementary model of hyper-individualistic decision making, in which people chose to increase their investment in school-taught "human capital" (job skills) to maximize opportunities for selection by employers who valued productive capacities (Becker 1964; Schultz 1961).

Human capital theory later became a major target of credentialist critiques, but initially few sociologists questioned where, in this labyrinth of classical economic rationality, social power might be found. Instead, the dominant thrust of sociological analysis, status attainment research, sought to explain large-scale, stratified, social outcomes within the individualist rubric of rational choice theory (Blau and Duncan 1967; Sewell and Hauser 1975). Educational and occupational

statuses remained individual-level variables in these studies, rather than concrete social relations that were embedded in history and political struggles.

In the 1970s, economists developed revisions of human capital theory that downplayed the empirically dubious ideas of the direct provision of educational skills and employers' measurement of such capacities. On the supply side, educational "signaling" theories argued that through degrees, students sought to signal their competence to employers, particularly when recruitment entailed uncertainties about adequate technical performance (Spence 1974). The signaling hypothesis attenuated the thorny issue of the precise content of educational skills. Students were seen as engaging in "defensive" degree posturing in labor market queues; that is, they sought to keep from losing ground relative to degree holders.

On the demand side of the employment relation, economists tempered simplistic notions about employers' assessments of candidates' skills with theories of "filtering" and "screening" (Arrow 1973; Thurow 1975). Here, educational signals (grades, degrees, school prestige, and so forth) and other markers of competence served to enhance probabilistic employers' computations of the future technical performance of candidates. In educational screening, degrees were alternately used to cut down large pools of applicants, to filter less productive recruits from more productive ones, to eliminate people who lacked particular skills, and to select applicants who had demonstrated their ability to learn new tasks (even if the tasks were not the specific ones required for the job).

Screening and signaling theories both suggest, but fail adequately to explain, a basic dimension of education-based recruitment, namely, that it tends to be used under conditions of employers' uncertainty about workers' future performance. The exact nature of such uncertainties, especially their political dimensions (the control of workers, as opposed to simple technical performance), is central to credentialing theory. Perhaps even more troubling is the residual human capital element of these theories, in which the demand for educationally induced technical

production capacities and purely instrumental rationality in decision making still loom large. The idea of the defensive pursuit of degrees, while cogent in some respects, does not explain the origins or growth of credentialized jobs. Serious consideration of historical change and social power were, and remain, an anathema to most economic renderings of the education-jobs relationship. The internal dynamics of schools likewise receive scant attention. Even the labor markets that economists (and many sociologists, for that matter) examined tended either to remain in highly aggregated form or to focus only on firms, to the neglect of the most heavily credentialized markets, the professions.

THE RENAISSANCE OF CREDENTIALIST THOUGHT

The late 1960s and 1970s also witnessed a major infusion of challenges to the accepted economic lore about the value of schooling for job performance. Several important early studies of the limits of education-based mobility presaged this outpouring of critical research (Clark 1961; Turner 1960; Wilensky 1964). In the 1970s, a politically benign critique of credential profusion emerged. Berg's (1971) well-publicized study of firms' recruitment of graduates held that these selections were irrational employers' preferences for credentials that had little or no relationship to employees' productivity. As a consequence, youths were being "overeducated" and warehoused in schools where they often bore the brunt of the oscillating effects of the over- or underproduction of specific types of degrees (Freeman 1976).

Dore (1976) carried the overeducation idea to a critique of global modernization efforts that assumed that Western educational models simply could be exported to the Third World, where they would spur economic growth. Others argued in a similar vein that schools and educational practices were "loosely coupled" systems with structures that were frequently copied in ritualistic fashion, and so failed to match up with the exigencies of new environments (Meyer and Rowan 1977; Weick 1976). Boudon (1974) and Jencks et al. (1972) each

challenged the purportedly positive effects of further education on persistent social inequalities, arguing that economic reforms would be more consequential in eradicating social differences than would increasing educational opportunities. Radical proposals of the period even called for the "deschooling" of society (Illich 1970). Clearly, Pollyanna-like faith in education was under attack, but the precise role of educational credentials as power phenomena was still unclear in these studies.

Weberian credentialing theory, the focus of this article, was resurrected by the work of Collins (1971, 1979, 1981). Collins's approach moved credentialing research from simple critiques of the pernicious effects of educational expansion on students' mentalities to a full-fledged theory of credential stratification. Collins entered the field particularly well disposed for the task. Cultural perspectives on organizational politics (Etzioni 1961; Kantor 1977) had matured and were significant components of Collins's *Conflict Sociology* (1975). Institutional analysis of organizations had broken with human capital and structuralist models to offer new insights into the internal and external contexts of firms and the social embeddedness of labor markets (Baron and Bielby 1980; Granovetter 1973, 1995; Meyer and Rowan 1977; Meyer et al. 1979; Pfeffer and Salancik 1978). Historical-theoretical analysis of knowledge production and monopolization in professional labor markets had laid bare the political dimensions of the previously taken-for-granted educational legitimacy of professional power (Larson 1977). European sociology of education had developed powerful research agendas that exposed the exclusionary effects of language and other forms of formally taught cultural capital (arbitrary, symbolic knowledge; decorum; tastes; rituals; and the like) on occupational destinations (Bernstein 1971-75; Bourdieu and Passeron 1977). Many of these developments were incorporated into Collins's synthesis of educational stratification research under the umbrella theory of credentialism.

Collins's (Ben-David and Collins 1966) early work on intellectual markets and his critique of structural-functional models of education (1971) laid the groundwork for *The Credential Society* (1979), which became the seminal work

of this genre. The latter study combined historical analysis and theoretical sophistication in demonstrating competition among status-groups (not "individuals," as in human capital, status attainment, and screening-signaling models) as the primary cause of credentialed stratification in professional and bureaucratic labor markets. Collins argued that these struggles and the resultant occupational monopolies are primarily concerned with the accumulation of cultural capital and social exclusion, rather than with meritocratic competition for school-taught technical skills that are "needed" in jobs. The internal development of educational systems, as well as the historical connections that these systems established with particular occupational groups, their ethnic and class constituencies, and state licensure movements (in professions), was treated in much detail. A later work (Collins 1981) further examined the historical dynamics of educational inflation and credentialing crises, thereby establishing the historical and political contingencies of credentialing structures and processes. Collins's status competition model was the specific point of departure for Brown's (1995) *Degrees of Control* and Murphy's (1988) *Social Closure* and was a major influence on many other discussions of credentialing processes (Dougherty 1994; Faia 1981; Kingston 1981; Labaree 1988, 1997; Parkin 1979).

This overview of the development and intellectual context of credentialing theory prepares the way for more in-depth consideration of several key issues in the perspective. In the sections that follow, I examine mass education and economic growth, the problem of education as skill versus culture, and the significance of degrees as "formal abstractions" in professional versus bureaucratic labor markets. In my conclusion, I assess the future trajectory of credentialism.

ECONOMIC GROWTH AND CREDENTIAL INFLATION

The competitive, decentralized educational system that formed in the United States gave rise to the first modern version of mass tertiary credentialism. Other nations developed

similar arrangements somewhat later, in many cases by way of initially more centralized, governmental directives (Archer 1979). The U.S. system is, at least nominally, a "contest" or "tournament" mobility arrangement, in which all individuals participate in the same forms of education and one must succeed at one level to advance to the next (Rosenbaum 1976; Turner 1960). Historically, a large number of U.S. students have succeeded in reaching higher and higher levels of the system, in contrast to credentialing in many other nations where students are terminally stratified into various career tracks at early stages.

Over the 20th century, mass education at the primary and secondary levels became a worldwide institution that was closely linked to ideologies of nation building (Fuller and Rubinson 1992; Meyer, Ramirez, and Soysal 1992; Meyer et al. 1979). The effects of lower-level educational expansion on economic productivity have been inconsistent, and the expansion of *higher* education has had practically no relationship to economic growth (Benevot 1992; Walters and Rubinson 1984). Indeed, economic productivity may produce mass education, rather than vice versa. Rubinson and Ralph (1984) showed that technical advances play a role in lower-level school expansion only at critical historical junctures, when status competition in schools has moved on to stratified, upper tiers of educational systems.

This last point is consonant with Collins's (1979) model of competitive expansion processes.⁴ It appears that *the cutting edge of status-group credentialism is at the apex of evolving educational hierarchies*, with defensive credentialing, middle-level technical-vocational certification, and lower-level mass literacy education following in its wake, perhaps as elements of an expanding "educational welfare state" that averts chronic unemployment crises (see the Conclusion).

WHAT GETS EXCHANGED: SKILLS OR CULTURAL CREDIT?

A central controversy in the education-jobs literature concerns the content and meaning

of degrees. Rather than assume a singular significance of diplomas, credentialing theory accords independent significance to the economic, cultural, and political dimensions of degrees that vary across national and historical contexts.

One meaning of degrees, of course, is the previously mentioned economic argument that technical skills embodied in degrees are productive in workplaces. Yet, the precise economic meaning of skill is difficult to assess and has received far less attention in the economic literature than one would expect. Spenner (1983) noted various problems in determining the match between skills in people and skills in positions. Degrees may signify more skills than graduates actually command, and job descriptions may list more or different skills than are actually required. These matches become especially hard to establish over historical time. Moreover, as Bourdieu (1996) suggested, job descriptions of skills in positions are significantly *outcomes* of organizational politics that ought not to be taken literally.

Employers may ignore even "signals" of skills. Miller and Rosenbaum (1997) found that employers who hired high school graduates distrusted the graduates' educational qualifications and tended to rely on interviews (even though they thought that this method also failed) or personal contacts in their hiring practices. In other instances, employers desire specific skills, but readily adapt to recruits' shortcomings with compensatory organizational innovations, such as job restructuring (Rosenbaum and Binder 1997). An impressive set of studies by Bills (1988a, 1988b, 1988c) looked at hiring practices in a range of organizational positions. Bills discovered much variation in the use of educational credentials in conjunction with other sources of recruitment information. Credentials were "mutable" indicators of skills that employers believed could be acquired elsewhere, and educational factors were far more important for outside hiring than for internal labor market promotions.

In sharp contrast to the technically efficacious view of skills, credentialing theorists highlight cultural and political aspects of skills as "monopolizable" *claims* of competence

that are not directly tied to productivity. Collins (1971) held that schools seldom teach specific job skills and, in concurrence with Berg (1971), argued that employers do not do a good job of assessing skill competencies, since on-the-job training works better for learning specific skills. Murphy (1988) contended that educational credentials monopolize access to on-the-job training.

Brown (1995) further suggested that when educational skills are valued by employers, general language and communications skills are the primary ones desired, and these abilities themselves are deeply embedded in exclusionary language cultural codes of the sort that Bernstein (1971-75) noted. Bourdieu's (1988, 1996) and Bourdieu and Passeron's (1977) work on cultural capital and Cookson and Persell's (1985) study of elite preparatory schools pointed to similar educationally induced cultural competencies in language and social rituals that flow in restricted social networks and lead to differential economic capital. The mystery surrounding employers' use of terms, such as *fit*, *personality*, and *chemistry*, in assessing candidates may be unveiled by more probing research on the possible cultural capital referents of these allusions.

The significance of credentials in *ensuring* compliance, particularly when workers' autonomy is pronounced, is a much-overlooked matter. This issue extends beyond the technical capacity to perform tasks to cultural indicators of workers' willingness to act in organizational interests. While Marxian analyses have argued that capitalist control of educational institutions (particular lower levels of mass education) habituates workers to a docile culture of discipline (Bowles and Gintis 1976), credentialing at the upper end of the system may serve a variety of purposes. Schooling in professional cultures, for example, develops dispositions for "ethical" public relations, collegiality, and noncompetitive-ness that protect monopolies of practice (Bledstein 1976; Brint 1994). Discretionary positions in private- and public-sector bureaucracies favor the recruitment of trustworthy, credentialed workers who have been steeped in appropriate organizational cultures that schools or, more precisely, disci-

plines emulate (e.g., the ethos of business, technical, scientific, aesthetic, and public relations work) (Brown 1995; DiPrete 1989; Kingston and Clawson 1990).

Weber (1922/1978) argued that credentials are a form of social credit that symbolically facilitates exchanges under conditions of social uncertainty. The certification of members' trustworthiness by a group means that individual malfeasance will threaten the legitimate authority of the *entire* credentialing body. Employers' selection of similar others thus ties trust to larger *alliances of authority* (Salancik and Pfeffer 1978). As Shapiro (1987) observed, schools are "agencies for the production of agents"; that is, they produce graduates who work as fiduciaries. Further chains of organizational surveillance and certification commonly emerge as guarantors of trust, as in the case of the historical development of educational accrediting associations (Wechsler 1977) and in the general proliferation of surveillance and testing practices surrounding employment (Foucault 1977; Hanson 1993; Nock 1993).

CREDENTIALS AS "FORMAL RULES" IN LABOR MARKET RECRUITMENT

The increasing homogeneity of schooling—the formal rationalization of education—has been the object of much discussion (Kamens 1977; Meyer and Rowan 1977; Murphy 1988; Weber 1922/1978; Weick 1976). Credential routinization is a critical part of this process. Beyond the simple charge that educational standardization dilutes learning by "McDonaldizing" education and by encouraging students to plod mindlessly through degree sequences in pursuit of guaranteed vocational rewards, it is important to understand exactly how credential standardization is linked to positional advantages in bureaucratic and professional labor markets.

Substantive versus Formal Spheres of Jurisdiction

Weber himself recognized that part of the

significance of formal rules of organizations is the ability of these rules to obscure the substantive bases of social power relationships. Educational degrees are formal rules of this sort. Degrees direct people to accept an abstraction (the symbolic, cultural embodiment of the degree itself) as a representation of something else (substantive knowledge, skill, or loyalty). Degree holders thus hold power over nondegree holders on the basis of a formal claim to competence or trustworthiness. The creation of standardized degrees, of rule-bound practices leading to their conferral, and of degree requirements in hiring and/or promotion represent the abstraction of substance (what one actually knows or does) and the creation of formal administrative rules of conduct (e.g., "120 credit hours is required for a baccalaureate degree" or "senior managers must be MBAs"). The perceived need to reduce organizational uncertainty (as a technical and political matter) is a general determinant of the creation of formality and a specific cause of the institutionalization of educational credentials (Stinchcombe, n.d.).⁵

The successful formalization of credentials offers several *technical* advantages in recruitment, but this abstraction of content happens only when relevant parties can agree that degrees represent some common substance (e.g., when courses are sufficiently standardized that "three credits" applies to a multiplicity of substantive courses or when the public, legislators, and legal practitioners come to the common belief that only persons with JD degrees can reliably deal with the law). The history of educational standardization is fraught with these kinds of difficulties (Beadie 1999; Wechsler 1977). Once these formal abstractions are established, they facilitate communications about graduates across organizations without the necessity of digging into, or being bothered by, information that is substantive "noise," such as students' quiz grades and papers. Credentials abstract qualities that are held to persist over time, so that substantive inquiry about the retention of knowledge can also be set aside. The generality of these abstractions further allows them to be transferred to new substantive purposes.

From the standpoint of organizational politics, the formalization of credentials has profound effects that suggest that diplomas may be more important for what they *do not* say than for what they enunciate. An old Spanish saying, "*Al hombre no le busquen abolegno*" ("No one explores a good man's pedigree") epitomizes this aspect of credentials as formal criteria that protect individuals from unauthorized scrutiny. Adherence to credentialed recruitment and promotion criteria, when it occurs, guarantees that only certain parties have the right to examine and question particular areas of graduates' competence and loyalty. Much of the ability to question the substance of students' claims of competence and trustworthiness is left behind with former teachers when they graduate, and employers subsequently accept degrees as legitimate formal abstractions.

Bourdieu's (1984, 1988, 1996) and Bourdieu and Passeron's (1977) understanding of the symbolic role of credentials in social reproduction stresses this same formal character of degrees, in contrast to actual abilities or proclivities. Exclusive education in French *grandes écoles* and elsewhere instills "general culture," rather than specific knowledge, and the resultant degrees lead to "titled" positions, rather than to work that has clearly spelled-out responsibilities (Bourdieu 1984, 1996). Moreover, for Bourdieu (1996), the basically magical consecration of graduates grants an "essential," permanent, status identity that transcends time and place limitations of ordinary competence. The adage that "education is one thing that they can't take away" surely owes much to this attribute of credentials.

Credentials in Two Labor Markets

Formal representation of substantive competence and character operates differently in various labor market contexts, depending on the specific organizational politics surrounding recruitment in each case. Broadly, one may speak of recruitment differences in two realms: bureaucratic and professional labor markets, with a range of intermediary types.

Bureaucratic Labor Market In bureaucratic

hierarchies, educational credentials offer two basic forms of social control. First, and pertaining more to lower-level credentialed bureaucratic positions, credentials "signal" (as economists from the signaling school would have it) technical competence in performing routine tasks. Credentials reduce uncertainties about candidates' abilities to do known tasks that are associated with these positions. High school diplomas; technical education certificates; and, to an increasing extent, lower-prestige college and university degrees often serve this end. The authority of credentials for placement in lower levels of bureaucracies may be incomplete, and further noneducational forms of assurance commonly supplement, or even supplant, preferences for degree holders (Bills 1992).

A second basic utility of credentials in bureaucracies resides in their ability to ensure compliance (not just "*Can you do the job?*" but "*Will you do it in good faith?*") when the organizational loyalty associated with particular positions is important, when structurally induced doubts about performance exist, and/or when it is difficult to monitor performance in these jobs by other means (Etzioni 1961; Kantor 1977; Salancik and Pfeffer 1978; Zucker 1986). Functional and spatial distances between upper and middle managers in large bureaucracies create a multiplicity of these positions in which the educational degrees of middle managers are regarded as initial, readily available signs of organizational trustworthiness.

The recruitment of upper-level managers involves great emphasis on this cultural character of their credentials. Senior managers and CEOs of leading U.S. firms have strong ties to elite undergraduate liberal arts programs and leading business and law schools. Useem and Karabel (1990) found that these degrees not only get graduates onto executive ladders of organizations, but advance graduates and make it much more likely that they will serve on interlocking directorates. Top managerial searches disproportionately recruit "generalists" with liberal arts degrees (Useem 1989). Consonant with this finding, Kingston (1981) and Kingston and Clawson (1990) reported that in elite MBA programs, neither college recruiters nor educators were

seeking or preparing skilled, productive candidates. Rather, both parties were preoccupied with the cultivated "fit" of applicants for jobs. In Japan, similar social embeddedness is evident in corporations that exclusively recruit from particular universities via alumni associations (Brinton and Kariya 1998; Roth and Xing 1994).

In bureaucratic contexts, different forms of credentialism inhere in various political sectors of firms. Individual assessment of candidates' technical capacities as represented in commonly held degrees and other noneducational marks of competence is the usual method for recruitment to lower-level bureaucratic positions. By contrast, the recruitment of top managers approaches the collectivist use of elite, culturally infused credentials that is characteristic of status-group formation in the professions, to which I now turn.

Professional Labor Market The professional labor market's use of credentials evinces important differences from the use of credentials in bureaucratic labor markets. Two distinctive traits of professional employment are *self-recruitment* and *self-regulation*. Professional groups employ standardized degrees to control the recruitment process (to recruit similar others) and to legitimate labor market monopolies in private practice and *across* professional work in firms (rather than as individual promotional criteria within internal labor markets). Professional mobility is thus a collective, rather than an individual, pursuit (Larson 1977; Parkin 1979). As Murphy (1988) noted, the individualistic pursuit of credentials that idealizes skills is an occupational "class" utilization of degrees, in contrast to collectivist, professional status-group monopolies that infuse credentials with esoteric culture.

Self-regulation in professional practice means that professionals have more direct control over the production, distribution, pricing, and judgment of adequacy of their products (often "services") than bureaucratic workers have over their work. The accountability of professionals to external parties is minimized by the professional influence of overseeing authorities (e.g., accreditation boards, state legislatures, or insurance organi-

zations). In the strongest cases of professional organization, recruitment practices legally stipulate state-licensed preferences for specific degrees that professions monitor. Powerful professions control the production of "expertise" (the content of professional schooling) and the supply of graduates to employers. The standardization of knowledge bases in schools reduces competition among professionals and builds public and organizational faith in the veracity of professional claims of expertise.

Monopolies over professional work are seldom complete, since historical struggles with competitors over jurisdictional areas of practice establish stratified, expanding "systems of professions" (e.g., physicians, nurses, chiropractors, and psychiatrists in health care), all with distinctive, formal educational qualifications for entry to practice (Abbott 1988). The cultures of professions, including their public ideologies, also vary across sectors of professional employment (e.g., business, applied science, human services, government, and culture industries) (Brint 1994). Professional authority as a whole has historically come under public scrutiny and consequent decline (e.g., the general loss of professional legitimacy in the United States in the Jacksonian era), which suggests the tenuous nature of such monopolies (Collins 1981; Hoffstadter 1963).

In sum, the strength and character of formal credentialing processes have much to do with the location of positions on a bureaucracy-profession continuum, that is, as individual workers who are objects of hierarchical control or as organized professionals who have autonomy. Professionals in private businesses (e.g., engineers), public relations personnel in governmental bureaus, CEOs, and banking-financial managers occupy distinct, intermediary positions with peculiar credentialing dynamics. Among higher civil servants, for example, their need for public trust, their dissociation from production ideologies, and peculiar national recruitment histories within their ranks create different credentialing demands from the requirements for private sector bureaucratic work (DiPrete 1989; Grandjean 1981). Much further study of credentialing in these interstices of professional

and bureaucratic organization is needed to hone our theoretical understanding of the mechanisms at work in regions and types of firms and in emerging and declining professions.

CONCLUSION

Although the trajectory of the growth of credentials along the previously mentioned path appears stable, it is worth cogitating the potential for change in the proliferation of educational credentials. It may be comforting to suppose that the expansion of credentials has a positive ceiling, but history suggests that there is great potential for further differentiation and growth (as the increase in master's, doctoral, and postdoctoral training today may indicate).

One possibility for substantive change in the content of schooling is put forth in Labaree's (1997) provocative and learned *How to Succeed in School Without Really Learning*, which argues for a renewal of democratic access to instruction in public virtues (civic education) and to social efficiency (actually teaching useful skills). Both values have long histories and demonstrable social constituencies that are now underserved by hegemonic credentialing ideologies and practices that vaunt education as a private good that begets social mobility. For Labaree, a critical first step is to challenge prevailing practices of educational administration and teacher education that perpetuate credentialism. Given the subordinate status of schools of education within university faculties, it is doubtful that these new missions can be advanced without the creation of a powerful alliance of disciplinary and professional organizations, employers, and governmental regulatory authorities.

Collins (1981, 2000) is less hopeful about educational reform, for he views credential crises as endemic to long-term (100–200 year) cycles of expansion, crisis, and contraction in credentialing systems. The most spectacular of these crashes was the decline of Medieval universities and the professions that they certified, but other historical examples are abundant. The overproduction of gradu-

ates and the lengthening of credentialing sequences are root causes of these crises, but collapse is a protracted event.⁶ Fateful indicators of crisis, unfolding over time, include declines in enrollments and school closures, rising tuition costs, public attacks on educational credibility, grade inflation, and the general multiplication of cheap degrees (Collins 1981). A number of these signs are becoming visible in the United States today. Indeed, current trends in U.S. higher education have led Collins to believe that the system is entering the early stages of decline. Collins observed that state breakdowns may advance the timetable of credentialing crises, given states' ultimate military role in upholding licensed monopolies through the legal system and given states' heavy involvement in educational funding.

Although Collins has generally pointed to the internal dynamics of credentialing systems (schools and workplaces) as the source of credential crises, some market-related crises may actually be forestalled by state intervention. States themselves have been complicit in long-term credential-expansion processes in maintaining what I would call an "educational welfare state." The idea of public education as a form of welfare or entitlement remains curiously absent from most public policy analysis in the social sciences, even though it is a critical component of state legitimacy and of credentialing systems. Heidenheimer's (1981) study of U.S. and European educational entitlements is an exception that noted the early U.S. development of public educational provisions and the late arrival of other forms of public social insurance and income maintenance programs—a situation that generally ran the reverse path in Europe.

Elsewhere (Brown 1995), I suggested that mass, state-supported credentialing systems that hold people out of labor markets in ever-lengthening educational credentialing sequences may be one solution to chronic unemployment problems associated with late capitalist development. The United States has a long history of relying on educational provisions to assuage social problems that extends at least to the post-World War II GI Bill, and the United States already has one of the

world's highest age requirements for compulsory education (17 years). The recent income stagnation of college graduates and the increasing willingness of graduates to forgo low-wage, service-sector employment in favor of graduate education lend some credence to the idea of neocompulsory higher education. Deindustrialization and technological change continue to place a large number of adult workers in various forms of compensatory and remedial vocational training (of sometimes-dubious exchange value) in community colleges.

Some societies more heavily rely on traditional welfare programs or mandatory military service, rather than on an educational welfare system, to ensure economic and political stability. The relative intensity of credentialism may depend on the balance of types of "welfare" assistance that nations use. States that most invest their legitimacy in educational entitlements (as opposed to other kinds of welfare) can least afford credential crises and so are much inclined to provide further educational subsidies that expand opportunities for higher degrees. States that have more privatized educational systems lack a tradition of this form of welfare-based intervention and so may be more vulnerable to credential market crises that limit the expansion of credentials.

If this educational welfare state fully materializes in the United States, it will not necessarily be all bad. If we can face up to the fact that mass higher education is not simply about the provision of skills (i.e., if students, employers, and school authorities come to doubt the instrumental value of schooling), schools may be transformed into the nonvocational, intellectual havens that Labaree (1997) had in mind as venues for a return to civic education. Even Marx sometimes imagined scientific and artistic pursuits in the postrevolutionary utopia as fanciful hobbies, so perhaps there is room for an ironic twist and partial appeasement of his vision in the dynamics of the capitalist system itself.

To conclude, it is clear that even after 30 years of study, much open territory remains in credentialing research. Despite the fecundity of the credentialing perspective, there is also a danger that the basic insights of credential-

ist thought regarding social inequalities could be lost. If sociology falls back into the myopic vision of human capital theory via piecemeal "refutations" of credentialing theory that lack historical-comparative scope, this reversal well may occur. We should realize, for example, that recent declines in selected graduates' income or in particular employers' use of other hiring criteria are probably fallen trees in the credentialed forest, rather than the clear-cutting of the forest itself. In any case, credentialing theory is as much about the decline as the growth of credentialing systems, and no one has advanced a more viable alternative explanation of these long-term processes.

NOTES

1. My focus is on the use of degrees as occupational/organizational *entry* criteria. Entry is critical to credentialism because it is here that the greatest amount of *uncertainty* about candidates' desirability exists and where degrees are consequently most in demand as trust-building social devices. Other forms of social credit (e.g., membership in religious groups and clubs of various sorts, ordeals and related testing devices, and personal contacts through letters of recommendation and other communications) that are closely related to degrees remain peripheral in this analysis, as do other consequences of degree holding, such as promotions and income.

2. The terms *credentialism* and *credentialing theory* are used in this article to refer to neo-Weberian analyses of the relationship between education and jobs.

3. It is interesting that Bowles and Gintis gave only scant reference to *higher education* in their book. This is an odd omission, given that the linkage between education and job entry is so strong at this level.

4. Other researchers have augmented Collins's model by noting the expansion-related influences of institution founding and system consolidation (Brown 1995), educational administrators' and politicians' advocacy of the expansion of community colleges and vocational education (Brint and Karabel

1989; Dougherty 1988, 1994), and the privatizing of public and educators' thinking about educational returns (Labaree 1988, 1997).

5. The informational concept of power and its role in the formalization of credentials used here is drawn from Stinchcombe's (1959, 1986, 1990) various treatments of the topic.

6. Thus, Boylan's (1993) observation that the effect of the increasing number of college degrees granted in the United States from 1980 to 1988 actually increased the relative exchange value of college degrees in the queue that contained high school diplomas does not refute the historical fact of credential inflation.

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