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The Press and the Public Sphere: Magazine Entrepreneurs in Antebellum America

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The Press and the Public Sphere: Magazine Entrepreneurs in Antebellum America

Abstract

How has access to the public sphere been affected by the rise of mass media? We address this question by studying magazines in America from the eighteenth century, when all periodicals had small circulations, to the mid-nineteenth century, when many reached mass audiences. Specifically, we investigate how the social positions of those who founded new magazines changed over this period. Previous research is divided on whether the rise of mass media made it more difficult for non-elites and industry outsiders to launch new magazines by creating large and powerful publishing houses, or made it easier by fostering acceptance of magazines as legitimate cultural products and improving access to resources needed for publishing. Using Goodman's (1972) modification of multiple regression for the analysis of categorical data, we examine whether magazine founders were increasingly drawn from social elite and from inside publishing, or from an increasingly broad swath of society. We find that magazine publishing was originally restricted to industry insiders, elite professionals, and the highly educated, but after the rise of mass media, most founders came from outside publishing and more were of middling stature – mostly small-town doctors and clergy without college degrees. We also find that magazines founded by industry insiders remained concentrated in the major publishing centers, while magazines founded by outsiders became geographically dispersed.

Who launches and runs communications media? This is a question of broad interest because media support a realm of social life between the state and private family life that has been labelled "civil society" (Ferguson 1767) or "the public sphere" (Habermas 1962). This realm is constituted by openly accessible information and communication about matters of general concern. Here people debate issues of public importance, an activity that many have argued is essential for thriving democracies (Ferguson 1767; Tocqueville 1835-40; Habermas 1962). Much public deliberation takes place in and through newspapers, magazines, radio, television, and the Internet; indeed, many scholars contend that such communications media are critical venues for public deliberation (Habermas 1962; Anderson 1983).

Scholars differ in their views of how participation in this realm evolved. Habermas (1962: 159-180) argued that in the nineteenth century, mass-market periodicals began to play an increasingly important role; as a result, media were transformed from venues for public conversation into commodities controlled by elites and intended for private consumption. Active participation was thus concentrated within a narrow, elite stratum of media owners and managers, while participation for others was degraded from reasoned deliberation to passive consumption. Critics countered that even in the eighteenth century, most people were excluded based on class, gender, or race/ethnicity, so the rise of mass media may have expanded circulation but could hardly have narrowed active participation in what was already a highly exclusive realm (Eley 1992; Fraser 1992; Gilroy 1993). Others argued that, particularly in the United States, the rise of mass media actually expanded active participation by supporting a proliferation of civic associations whose members were drawn from all ranks of society (Skocpol 1997; Skocpol, Ganz, and Munson 2000; Starr 2004).

¹ This optimistic view that civil society necessarily fosters democracy has been contradicted by recent research showing that civil society institutions can, in some circumstances, support authoritarian regimes (e.g., Armony 2004; Riley 2010). This work underscores the importance of studying who participates in civil-society organizations, and to what ends.

² Recently, Habermas (2006) argued that this commodification of media and stratification of active participation might not be universal, but it would certainly occur when media were for-profit enterprises.

Existing approaches have ignored the fact that media ventures are formal organizations, and have therefore neglected a large body of research that has shown how industry evolution affects who controls organizations (DiMaggio and Powell 1983; Hannan and Freeman 1989; Fligstein 2001). We investigate who participated in the public sphere by analyzing who launched of new media outlets. We treat the problem of founding new media as akin to the problem of founding any new organization: media entrepreneurs have to obtain equipment and supplies, secure distribution, and cultivate contributors, audiences, and advertisers. In doing so, we extend studies of civil society beyond their usual emphasis on access to debates themselves to consider the more fundamental issue of access to the resources needed to create channels for those debates.

Existing approaches have generally assumed that the social positions of participants in the public sphere can be arrayed along a single dimension that ranges from a homogeneous elite above to the masses below; they have also assumed that this status ordering is stable. But this simplistic model of the public sphere, and indeed of society itself, is problematic, as there are multiple forms of status (Weber 1968; Bourdieu 1984). If different forms of status provide access to different types of resources needed to gain recognition from audiences and other media producers, then there may be multiple paths into the public sphere. Moreover, changes in material and cultural conditions may alter the value of different status markers and the utility of their attendant resources. This, in turn, may transform access to the public sphere and change its composition. Recognizing this possibility may offer a way to resolve debates about how the rise of mass media affected participation in the public sphere.

We examine multiple forms of status that delineate the social positions of those who founded new periodicals, and we investigate how periodical founders' social positions evolved as mass media arose. We study America from the eighteenth to the mid-nineteenth century, when the first mass media appeared. America provides an excellent case study.³ Before the Revolution, the

³ Much previous work has examined European societies. But studies on Europe suffer from the systematic exclusion of materials produced by socially and politically marginal publishers (Darnton 1982). Outside of Holland, censorship was rigidly enforced and the right to print was tightly controlled by guilds (Febvre and Martin 1971). Although thriving literary undergrounds sprang up (Darnton 1982; Johns 1998), underground

colonies were very different political and social units, only some of which encouraged public deliberation. After the Revolution, the new nation was an uneasy amalgam of states that were loosely bound by a central government whose powers were limited, yet whose constitution demanded political participation by all (male, non-slave) citizens. Congress moved quickly to guarantee freedom of the press and expand postal distribution, so periodicals flourished. By the mid-nineteenth century, America had become a leader in mass media (Starr 2004), with over 2,500 newspapers and almost 1,000 magazines, many with large circulations.

We study magazines rather than newspapers because magazines' contents were more varied, so they captured a broader range of public life. Magazines diffused information to support democratic politics, trade, and education; they sustained religious, literary, and artistic communities; and they fostered the development of science and specialized occupations. In this era, most magazines circulated beyond a single locale, so they reached farther-flung audiences than newspapers. Magazines were often sold in far larger numbers than newspapers and so were more truly mass media. By transmitting facts and opinions across great distances, magazines literally mediated between people, weaving "invisible threads of connection" (Starr 2004: 24) that transformed dispersed individuals into cohesive communities (Park 1940; Anderson 1983).

Our study of "old" new media is relevant to scholars who are studying the rise of "new" new media, such as online magazines, news consolidators, blogs, and content-sharing sites (e.g., Hargittai and Walejko 2008; Hindman 2008; Schradie 2010). Media scholars, journalists, and politicians all argue that the development of new technologies and new forms of media can transform opportunities for participation in media production. The development of antebellum periodical publishing offers a not-so-distant mirror on these issues.

We begin by describing how the American public sphere evolved from the colonial era to the eve of the Civil War, focusing on the evolution of American magazines. We then lay out

publications were rarely archived. In America, by contrast, the colonial era's weak censorship enforcement and the republican era's open political culture made it more likely that media produced by political outsiders were archived.

predictions about how the development of the magazine industry shaped participation in magazine publishing, drawing on two complementary sources: political theories of civil society and organizational theories of industry evolution. After describing our data sources, measures, and analytical methods, we reveal the results of our analysis. We conclude by discussing how the results of our analysis can redirect research on the public sphere and suggest new directions for research on entrepreneurship in contemporary settings – not just new media outlets like blogs and web-based periodicals, but also new ventures in other sectors.

Defining Key Terms

Before going further, we should clarify concepts that are central to our analysis. First, how do we conceive of "the public sphere" and "civil society?" Both terms have been used in different, sometimes conflicting ways. Although Habermas' (1962) definition of the public sphere included only the institutions that support the free exchange of facts and ideas required to form public opinion, critics have asserted the existence of "counterpublics" in groups excluded from Habermas' public sphere on the basis of class, gender, or race/ethnicity (Eley 1992; Fraser 1992; Gilroy 1993). Other scholars have extended the concept to any social arena that supports communication and collective decision-making between institutional spheres, including "interstitial publics" in state bureaucratic, commercial, and civic organizations (Emirbayer and Sheller 1999). Similarly, nearly all scholars have described civil society as a realm outside both the state and individuals' private lives, but they drew the boundaries of this realm differently. Some conceptions include all elements of collective life beyond the state (Ferguson 1767; Putnam 2000), others excluded both the state and economic activity (Cohen and Arato 1992), while still others exclude political associations (Tocqueville 1835-40; Howard 2003). Our conception is broad: we use these terms interchangeably, for the sake of linguistic variety, to mean a realm where people send and receive information and opinions about any topic of collective interest; this realm is constituted by formal and informal associations outside the family circle and by communications media.

Second, what do we mean by "status" and "social position"? Status has been defined in terms of relationships (Podolny 1993), demographic characteristics (Blau 1977), and cultural schemas (Mohr 1998). Our conception encompasses all of these characterizations: we define status as any observable distinction between people that stratifies their access to resources. Status may be conferred by ties to people and institutions, membership in demographic groups, and cultural schemas. Economic resources can support the launch of new media, but cultural resources (e.g., formal certification) and social resources (e.g., relationships with powerful actors) can also help media founders gain access to productive assets and attract readers. Building on our definition of status, we define social position as a unique combination of status characteristics. This definition invokes the multiplicity of resources that can facilitate access to the public sphere; it also recognizes that combinations of status characteristics may be efficacious in ways not directly reducible to their individual components.

Magazines and the Evolution of the Public Sphere in America

The first American magazines appeared within three days of each other in February 1741, produced by rival printers Andrew Bradford and Benjamin Franklin. These pioneering publications, which were modelled on English ones, included government proceedings and official reports, essays on politics, history, and religion, reports of scientific experiments, price lists, poetry, mathematical puzzles, and letters. Although their founders expected these publications would have long lives, both were short-lived: Bradford's lasted only three issues and Franklin's six.

In their wake, the magazine industry struggled. Only 23 magazines were founded before the end of the Revolution in 1783. Not until peace was restored did magazines gain a firm foothold on American society. Between 1790 and 1830, the founding rate rose and began to outstrip the failure rate, so the number of magazines in print rose from 12 in 1790 to 83 in 1810 and 346 in 1830. Industry growth continued to accelerate; by 1860, almost 1,000 magazines were in print. As they grew in numbers, American magazines became increasingly robust – the median life span increased five-fold – and some reached mass audiences. Although data on circulation are available for only a

few magazines at scattered points in time, between 1841 and 1860, 62 of the 244 magazines for which we could find data had circulations over 10,000, and 13 boasted circulations over 100,000. To put this in perspective, by far the best-selling antebellum book, *Uncle Tom's Cabin*, sold 310,000 copies; the next-best-selling novel of the 1850s sold fewer than 80,000 copies (Zboray 1993: 122). Some magazine publishing houses grew massive; they commanded vast resources and distributed their products across the country. Their enormous revenues allowed them to attract star authors like Herman Melville and Nathaniel Hawthorne. The ability of these firms to achieve economies of scale and scope ensured a steady supply of truly mass media, but also made them fierce competitors.

How did American magazines become so numerous and robust, and how did some of them manage to cultivate mass audiences? The answer is simple: material and cultural supports for magazine publishing improved enormously. Perhaps the most fundamental fact standing in the way of the earliest American magazines was the lack of an audience. The colonies were sparsely settled and few people lived in urban areas near the printers who produced magazines. Most people grew or made what they wore and used, or bartered for objects they did not produce themselves, so they had little cash to spare for non-essentials like magazines. But the situation improved greatly as the population exploded from less than one million in 1740 to over 30 million in 1860, and the number of places with over 2,500 inhabitants rose from 24 in 1790 to 392 in 1860. In addition, the market economy expanded: in constant dollars, GDP *per capita* increased 150% from 1790 to 1860. In sum, there was a phenomenal increase in the potential audience for magazines: many more people, especially in urban areas, with more cash to spend on magazines.

Basic production and distribution technologies – printing presses and the postal system – also became more efficient and widespread. In the earliest years, the scarcity of printing presses greatly hampered publishing efforts. The situation was exacerbated by the fact that presses were slow, cumbersome, manually powered mechanisms that required skilled craftsmen to operate (Berry and Poole 1966; Moran 1973). By the 1830s, steam-powered presses that could be run by less-skilled workers appeared in every state and territory. Dramatic improvements in papermaking in the early nineteenth century substantially decreased in paper prices, further fuelling the growth of

magazines (Moran 1973; Smith 1979). The earliest magazines' circulations were local because they were sold primarily at their printers' shops or at shops in nearby towns. In 1794, Congress established the Post Office as a permanent arm of the state, giving magazine publishers access to an increasingly extensive, reliable, and inexpensive distribution channel. Magazine distribution expanded as the postal network grew exponentially, from 31 post offices and fewer than 1,500 miles of post roads in 1740 to over 28,000 post offices and 240,000 miles of roads in 1860 (Kielbowicz 1989; John 1995). Improvements in the speed and reliability of transportation kept pace with growth of the postal system, as mail transport shifted from horseback over unpaved pathways to horse-drawn carriages over better-maintained roads, and as the post relied more and more on steamboats, canals, and railroads.

A final critical factor was the development of copyright law. Copyright was virtually nonexistent before 1790 and not applied to magazines until the 1820s (Bugbee 1967; Charvat 1968). Although early magazines benefitted from access to a wide variety of free content in other publications, they had no legal protection for any original material developed by their contributors, which hindered their ability to differentiate themselves from rival periodicals. As copyright law began to be used by magazine publishers, norms developed concerning the payment of authors. This, in turn, led to the emergence of professional authors: people, like Washington Irving and James Fenimore Cooper, who could literally scratch out decent livings with their pens. The possibility of a career as a professional writer increased greatly the volume of original material generated for magazines, by both professional authors and aspiring hopefuls, but at the same time, norms about paying authors made this material more expensive.

Summary. Between the appearance of the first American magazines in 1741 and the outbreak of the Civil War 120 years later, magazines evolved from being rare, poorly understood, and small-circulation, to being common, accepted, and often mass media. At the same time, the resources needed to run magazines became more readily available. Improvements in resource availability were offset by the increasing cost of content as authorship became a paid occupation and by the rise of

large publishers that threatened fierce competition against new entrants. The question remains as to what effect these changes had on the kinds of people who launched magazines.

Magazine Publishing and the Challenges of Entrepreneurship

Political theorists disagree about how the evolution of media during the eighteenth and nineteenth centuries affected participation in the public sphere. Some argue that the rise of mass media concentrated participation within a narrow, elite social stratum, while others claim that the growth of civic associations that sponsored magazines combined to broaden participation. Below, we consider both arguments in light of organizational research on entrepreneurship. We then describe how the resources provided by three forms of status – occupation, education, and location – evolved from the eighteenth to the mid-nineteenth century. Based on these historical trajectories, we develop explicit hypotheses about how the effect of each status marker was altered by the rise of mass media.

Narrowing Participation: Competition and Exclusion from Resource Acquisition

A long tradition in organizational research suggests that the entrepreneurial task is more formidable in mature industries than in new ones because in new industries, most organizations are young and small, and relations between them are fluid, while mature industries are often dominated by a few very large and very old organizations that have forged strong ties to suppliers and distributors. Because large, long-established firms are both widely recognized and resource-rich, they are powerful competitors and their presence may make it hard for anyone to launch new enterprises (Hannan and Freeman 1989). Moreover, as industries mature, existing firms' ties to suppliers and distributors strengthen (DiMaggio and Powell 1983); it is more difficult for outsiders to penetrate the settled social relations that characterize mature industries than the fluid situations that prevail in new industries (Fligstein 2001). As industries mature, successful entrepreneurs will increasingly be either industry insiders or outsiders with considerable wealth or high social status, as only members of those groups have the resources needed to scale rising barriers to entry. Outsiders with low social status will be increasingly excluded.

This suggests that, as Habermas argued, the development of magazine publishing should push control into the hands of a few large firms. Evidence for such competitive exclusion is apparent in the history of American magazines. In the eighteenth century, magazines were small and doubtful ventures, but by the mid-nineteenth century, large publishing houses operating industrial presses issued many magazines with print runs in the tens of thousands. The Harper brothers, for instance, produced both a weekly and a monthly beginning in the 1850s, each with circulations greater than 50,000. These magazines were distributed across the nation, intensifying competition for readers. Either substantial financial backing or ties to the industry may have been necessary for new publishing ventures to withstand competition from these large rivals.

Broadening Participation: Legitimacy and Access to Resources

Other organizational research suggests instead that launching new ventures may be harder in new industries than in mature ones. In new industries, customers and suppliers are uncertain, even skeptical (Aldrich and Fiol 1994), so entrepreneurs must struggle to define opportunities, identify resources, and pry them away from existing organizations (Rao 1998). Given this difficulty, entrepreneurs in new industries must depend on personal and social resources, such as the possession of scarce resources, personal reputations, or connections to prominent others, to substitute for direct measurement of worth to customers and suppliers (DiMaggio 1982; Granovetter and McGuire 1998; Podolny 1993). In contrast, as industries matures, they become legitimate, which makes it easier to recruit employees and solicit sales, and gain access to the deep pools of industry-specific resources that develop as industries mature (Hannan and Freeman 1989). Moreover, as industries mature, entrepreneurs learn what to do – and *not* do – from observing predecessors (Aldrich and Fiol 1994). In sum, entrepreneurs in mature industries have less need for high personal standing or prominent friends.

This suggests that, contrary to what Habermas and many of his critics argued, participation in the public sphere broadened beyond the bourgeois elite. In support of this idea, we note that many practical challenges to publishing magazines declined dramatically between the eighteenth and midnineteenth century: demand increased as audiences expanded and magazines became legitimate cultural products; key resources like paper, printing presses, postal distribution, and original content all became more available. For this reason, it may have been increasingly easy for anyone – not just elites – to found magazines. Moreover, as others argued (Skocpol 1999; Skocpol *et al.* 2000; Starr 2004), mass media may have expanded active participation in the public sphere by supporting civic associations whose members were drawn from all ranks of society. Indeed, magazines were bolstered by civic and reform associations with wide memberships, which used periodicals to broadcast their messages (Hall 1982; Newman 2002; King and Haveman 2008).

The Evolution of Status, Social Positions, and Associated Resources

The arguments above do not differentiate among aspects of social position, nor do they consider how the value of any status marker and its attendant resources may vary over time. In this section, we deepen our analysis by examining the historical development of three important markers of status: occupation, education, and location. We discuss each in turn, paying attention to the evolution of its attendant resources between the eighteenth and mid-nineteenth century.

Occupation provides a general indicator of status and of founders' connections to the publishing industry. Four out of five magazine founders belonged to three occupational groups: the publishing trades (printers, publishers, editors, booksellers, bookbinders, and engravers), writers, and the traditional professions (physicians, ministers, and lawyers). We discuss the status of each occupational group, and the resources attached to it, in turn.

In the eighteenth century, printing presses were rare and difficult to operate, and thus *printers* were highly skilled craftspeople. Although few received much formal education, many had ties to political elites: they printed official documents for colonial governments, and many also acted as postmasters. Because print shops also served as post offices, publishing houses, and bookstores, and they were focal points for the exchange of news and intellectual engagement, serving the same

⁴ Other magazine founders were music composers and/or publishers, merchants, manufacturers, engineers, state officials, and teachers.

civic function as English coffee houses, French salons, and German Tischgesellschaften (Wroth 1931; Everton 2005). As the landlords of the eighteenth-century American public sphere, printers were well-positioned to acquire contents and oversee production, gain access to distribution channels, and attract audiences. During the nineteenth century, however, printers' status declined. Printing became industrialized and printers were deskilled as printing presses became easier to use. Technological improvements driven, in large part, by demand from the growing magazine and newspaper industries reduced the status of printers from proprietors of the public sphere to mere employees of publishing houses. In contrast, the status of other publishing-industry occupations (publisher, editor, and bookseller) remained high throughout the antebellum era. Their focus on the written word demanded possession of considerable cultural resources and knowledge of literature. Moreover, as publishing-industry insiders, they had ready access to persistently valuable social resources.

In the eighteenth century, *writers* were almost all patricians: gentlemen-scholars who wrote for their own amusement and for the edification of others (Charvat 1968). They possessed the funds to support lives of leisure and the cultivation to write with style. In the mid-nineteenth century, writers were more heterogeneous because an increasing number earned their living by writing. Mid-nineteenth century writers included not only belletrists, but also hack journalists, technical writers, and bohemians; thus, their economic, social, and cultural resources varied considerably.

Like writers, the status of *professionals* underwent a dramatic shift. In the eighteenth century, most were members of the educated elite. Lawyers occupied the apex of colonial society (Ferguson 1984; Haber 1991); they were often highly educated, well remunerated, and many were directly involved in colonial politics. Many of the eighteenth century's most accomplished authors were lawyers. Ministers, too, were well educated and, in nine of thirteen colonies, supported by official, state-sanctioned churches. Although physicians were not quite so distinguished and faced competition from barbers, midwives, and lay practitioners, medicine was still an acceptable occupation for younger sons of well-to-do families (Haber 1991; Starr 1982). As the nineteenth

century progressed, however, professionals' status became contested. As the legal profession expanded, lawyers became more diverse in class, training, and credentials (Haber 1991). Ministers were challenged as disestablishment severed their relationship to the state, isolated them from political elites, and made them economically dependent on their local congregations (Douglas 1977; Haber 1991). Moreover, interdenominational disputes about theology and church organization undermined ministers' claims to authority (Hatch 1989). Physicians faced increasing challenges from homeopaths, mesmerists, phrenologists, Thomsonians, and eclectics (Starr 1982). They often had to supplement their practices with farming, ministerial work, or trade (Haber 1991). A final challenge to all professionals developed as the populist politics of the Jacksonian era reinforced hostility to explicit marks of distinction.

Education was a stable indicator of elevated status because attending college was a privilege accorded only to those the top of socioeconomic pyramid: in 1800 there were 2.7 college students per 10,000 Americans; in 1850, 10.0 per 10,000 (Burke 1973: 22, Table 2.3). College graduates were generally from wealthy families, and because of the erudition they gained and the relationships they forged in college, they also possessed substantial cultural and social resources.

Finally, *location* stratified access to a variety of cultural and material resources associated with publishing. The first print shops in the colonies were in Boston, New York, and Philadelphia, but printing spread quickly to the backwoods (Lehmann-Haupt 1951), as early wooden presses were relatively portable and journeyman printers moved to find clients (Silver 1967). During the nineteenth century, large publishing houses arose in Boston, New York, and Philadelphia, and they remained concentrated in those cities. Between 1841 and 1860, of the 62 magazines for which we have circulation data and which had circulations greater than 10,000, 51 were published in these three cities. Residence in any one of these cities put potential magazine founders close to peerless cultural resources. Thus, location is an indicator of status, similar to its position in Bourdieu's (1984, 1996) analysis, where residence in Paris indicated high status and residence in the provinces indicated low status.

Summary. As this analysis demonstrates, the value of the resources granted by various forms of status varied greatly between the eighteenth and mid-nineteenth century. Printers' resources declined, while those of other publishing occupations remained strong. Writers became less patrician and more heterogeneous, so their social and economic resources generally declined, although their resources specific to publishing remained valuable. Professionals initially had high social standing, but during the nineteenth century their status became contested – although lawyers' consistently high incomes may have buffered them from this trend. College education was a consistently valuable source of cultural and social resources, and an indicator of wealth. Finally, location in a publishing center retained its value.

Predictions

On the one hand, if the rise of mass publishers raised barriers to entry and narrowed participation in magazine publishing, we would expect that magazine entrepreneurship to be increasingly confined to the possessors of valuable forms of status. Members of publishing trades (other than printers) should be more common among magazine founders in the mid-nineteenth century than the eighteenth century, but industry outsiders, printers, and professionals should be less common. Similarly, college education should become more common because of its widely recognized value. Also, new magazines, especially those founded by industry outsiders, should be increasingly located in publishing centers.

On the other hand, if the legitimation of magazines and improved access to resources broadened participation in magazine publishing, we would expect the opposite. Professionals and other industry outsiders should be more common in the mid-nineteenth century than in the eighteenth century, while printers, members of other publishing trades, and college graduates should be less common. Finally, magazines should be increasingly published outside Boston, New York, and Philadelphia.

Research Design

We test both of these predictions by analyzing original data collected on 4,989 American magazines published between 1741, the year the first American magazines were founded and 1860, the year before the outbreak of the Civil War. We gathered these data from nine primary and 88 secondary sources. The American Periodical Series Online, which contains digital images of over 1,100 magazines, is our main primary source. We also searched the American Antiquarian Society's online catalogue, viewed hundreds of magazine microfilms in the Cornell, Columbia, and New York Public Libraries, and searched three online archives: the *Archive of Americana*, *America's Historical Newspapers*, and *The Nineteenth Century in Print*. Finally, we conducted Internet searches to tap into sources elsewhere. Because many magazines left no physical trace and many others left only a partial record, secondary sources were critical. Beginning with two industry histories (Mott 1930, 1938a, 1938b; Tebbel and Zuckerman 1991), we conducted a snowball search for secondary sources, and found 42 book-length sources, 26 check-lists and catalogues, and 10 articles. The resulting dataset includes virtually all magazines published during the antebellum era, according to estimates by Mott (1930, 1938a, 1938b), whose three-volume history remains a standard reference.

We focus on two time periods: from 1741 to 1800, during which time American magazines reached only small audiences, and from 1841 to 1860, when many American magazines reached mass audiences. We limited our analysis to these periods to maximize the temporal contrast. We sought background information on the founders of all 148 magazines launched between 1741 and 1800, and on the founders of a random sample of 150 magazines from the 2,678 founded between 1841 and 1860. Because we cannot observe everyone who tried to start magazines, but only those who succeeded, our analysis, like many other analyses of entrepreneurship, will be biased toward success (Aldrich and Wiedenmayer 1993). We mitigated this bias by sampling from *all* magazines, both those that failed after publishing a single issue and those that achieved lasting success.

To gather data on founders, we searched the *American National Biography* (2000), the *Oxford Dictionary of National Biography* (2006), *Who Was Who in America, 1607-1896* (1967), and *Appleton's*

Cyclopedia of American Biography (Wilson, Fiske, and Klos 1887-1889).⁵ We also pored over histories of publishing (Thomas 1874; Oswald 1937; Wroth 1931; Silver 1967; McMurtry 1936; Lehmann-Haupt 1941, 1951) and intellectual and literary life (Bender 1988; Bercovitch 1994). We completed our searches online. Of the 148 magazines published in the eighteenth century, we identified the founders of all but five magazines, which were launched by four organizations and 165 men. We uncovered data on all but three of those men. For the sample of 150 magazines from the midnineteenth century, we were able to identify founders of 125, which were launched by 17 organizations and 125 individuals (120 men and five women). We were able to gather data on 105 of these individuals. The details of our samples are summarized in Table 1.

[Table 1 about here]

Measures

Founders' social positions. Many magazine founders had multiple occupations; e.g., lawyer and writer, physician and college professor, or printer, publisher, and postmaster. We coded all occupations held by each individual – printer, other publishing trade, writer, minister, lawyer, doctor, other – as a series of dummy variables. We then coded each individual's primary occupation as a series of dichotomous variables (printer, other publishing trade, writer, minister, lawyer, doctor, other), based on biographies and histories. For the vast majority of cases, this task was straightforward; for instance, we coded any professional who was also a college professor as a professional because the former occupation was a prerequisite for the latter. For the few ambiguous cases, we coded as primary the earliest occupation. There were seven such cases: five professionals who later embarked upon careers as writers, one lawyer who became a prominent landowner, and one author who became a social reformer and lecturer.

The American occupational structure changed greatly between the eighteenth and midnineteenth century. To account for this shift, we gathered data on the number of professionals in

⁵ Although *Appleton's* has many biased entries, basic data about founders' education, kith and kin, and occupations are usually reliable (Dobson 1993).

1770 and 1850, the midpoints of the two time periods.⁶ For clergy, counts for 1770 are based on prosopographies of colonial clergy (Weis 1950, 1976, 1977, 1978). For lawyers, estimates for 1770 are based Massachusetts counts in 1740, 1775, and 1840 (Gawalt 1979: 14, Table 1) and national counts in 1850 (Reed 1921: 422, Table 2). For doctors, estimates for 1770 come from Starr (1982: 40). For all three professions, counts for 1850 come from Reed (1921: 442).

We coded *education* as a dummy variable indicating whether the founder had attended college. To account the fact that there were more college-educated people in the mid-nineteenth century than in the eighteenth century, we gathered data on the number of college students *per capita* in 1800 (the first year such data are available) and 1850 (the midpoint of the second period) (Burke 1973: 22, Table 2.3). Note that education was not highly correlated with professional occupation, as many professionals learned through apprenticeship rather than in college; the correlation was greater in the mid-nineteenth century than in the eighteenth century, but not as high as it is in contemporary American society.

Magazine location. We created a trichotomous ordinal variable indicating whether a magazine was published in Boston, Philadelphia, or New York; in another urban area; or in a rural community. We distinguished between urban and rural areas using data on municipal population (Moffat 1992, 1996; Purvis 1995; U.S. Bureau of the Census 1998). Following Census Bureau standards, we used a threshold of 2,500 inhabitants to delineate urban areas from rural ones.

Methods of Analysis

We pursued two different analytical strategies. First, we compared frequencies of founders' occupation and education across time using 2×2 contingency tables and χ^2 tests to assess whether there were statistically significant changes over time. When cell counts are lower than five, the χ^2 test is not accurate; for the tables that had low cell counts, we used the Fisher's exact test instead. Our unit of analysis here was the individual founder. Note that for each occupation, we conducted

⁶ We would have liked to count the number of printers, people in other publishing trades, and writers, but such data are simply not available.

a separate analysis, comparing frequencies of magazine founders in the focal occupation to frequencies of founders in *any other* occupation. This allowed us to assess the statistical significance of trends over time for each occupation separately, which is necessary because historical trends in status varied greatly across occupations. We then assessed the statistical significance of time trends in the trichotomous magazine location variable by analyzing a 3×2 contingency table. The unit of analysis here was the magazine.

Because the contexts from which founders were drawn changed greatly, we took these changes into consideration as much as possible, given data limitations, by using counts of professionals and college students. We used these counts to compare the likelihood of a magazine founder being a professional or having a college education, relative to the population at large, in the eighteenth and mid-nineteenth centuries.

Next, we performed a multivariate analysis of over-time variation in the frequency of magazines with different combinations of founder occupations, education, and location. This allowed us to consider not only the change in each status marker, but also changes in relationships among them. Because all the variables in our analysis are categorical, we used log-linear techniques (Goodman 1970; Bishop, Fienberg, and Holland 1975; Hout 1983). We cross-classified magazines according to five dichotomous variables: the presence or absence of a founder in the professions, the presence or absence of a founder in the publishing trades, the presence or absence of a founder with a college education, whether or not the magazine was published in one of the three publishing centers, and time period. Note that we simplified the occupational categories in order to generate a table with reasonably large cell counts. Including more fine-grained occupational categories would have resulted in a prohibitively large numbers of cells with very low observed counts. For this analysis, we recoded all variables to -1 when the focal attribute was absent and +1 when the focal attribute was present, as is customary in log-linear analysis. This yields effect estimates that are relative to category means, which simplifies the interpretation of main effects and interactions.

We modeled how changes in the social positions of founders affected the odds that magazines whose founders displayed a given combination of status characteristics appeared in the

second period rather than the first. We used Goodman's (1972) modification of multiple regression for the analysis of categorical variables, treating time period as the variable to be predicted. We analyzed the data in a five-way table, $\{A, B, C, D, E\}$, where E is the variable to be predicted (the dichotomous time-period variable) and A, B, C, and D are the dichotomous predictor variables. We selected the model with the fewest parameters that that did not differ significantly from the data using a stepwise procedure (Goodman 1970). We compared the observed frequencies in the five-way table to the estimated expected frequencies under the selected model using the likelihood-ratio and goodness-of-fit χ^2 statistics. Because our sample is small (226 magazines with known founders), these statistics are merely suggestive. To overcome this small-sample problem, we used the estimated parameters obtained from the saturated model as a rough guide to selecting which parameters should be included in the final model (Goodman 1970). We then used the estimated expected frequencies under that model to estimate the odds of being in the second period rather than the first for each combination of predictor variables. The models considered in this paper can be viewed as special examples of log-linear models; however, our models treated the variable to be predicted and the predictor variables asymmetrically.

Results: Who Founded American Magazines?

Univariate Analysis

Table 2 presents this analysis. Recall that for each occupation, we conducted a separate trend analysis, using a 2×2 contingency table. The first row of each 2×2 table records frequencies of magazine founders in the focal occupation; the second, frequencies of magazine founders in *any other* occupation. The first column records frequencies in the eighteenth century; the second, in the midnineteenth century. To conserve space, Table 2 shows only the first row of each 2×2 table and omits the second row. Thus, the first row in Table 2 records frequencies of magazine founders in the publishing trades, while the second and third rows decompose this occupational group into printers and other publishing trades. Similarly, we show only the first row of the 2×2 table for education, which records frequencies of magazine founders who attended college. Note that we

show all three rows of the 3×2 table for magazine location. For each contingency table, we report the χ^2 statistic, which increases with the statistical significance of the time trend. We begin by describing the social positions of eighteenth-century magazine founders, then compare them to their mid-nineteenth-century successors.

[Table 2 about here]

The eighteenth century. The very earliest American magazines were produced by men of high social standing; nearly all had longstanding connections to publishing, were elite professionals, or members of the learned elite. Between 1741 and 1800, we identified 165 men (no women) who launched 143 magazines; we were able to ascertain primary occupations for 162 of them. Strikingly, two-thirds of eighteenth-century magazine founders whose primary occupations we could determine were in publishing: 81 were printers and 28 were members of other publishing trades. In addition to Franklin and Bradford, these included Isaiah Thomas, one of the most respected businessmen of his time (Wroth 1931).

The other eighteenth-century magazine founders were for the most part writers (6) and professionals (30). Among the writers were the Jefferson protégé John B. Colvin and the patricians Samuel Harrison Smith, John Lathrop Jr., and Philip Freneau. The clergy included the prominent Boston minister, linguist, and historian Thomas Prince, and the first and second Bishops of the Methodist Church in America, Thomas Coke and Francis Asbury. Of the lawyers, two were also clergymen, two were also poets, one was also a printer, and one (Charles Brockden Brown) was also a novelist. The prevalence of lawyers is not surprising, given the many contributions they made to American letters (Ferguson 1984). Finally, the physicians who founded magazines in the eighteenth century were of higher status than most doctors: two were professors at Columbia's Medical School and one was a protégé of Yale University President Timothy Dwight. As shown in the bottom part of Table 2, which takes into consideration the number of professionals in the population at large, magazine founders in the eighteenth century were 66 times more likely to be professionals than the average American.

Many eighteenth-century magazine founders were highly educated. Five graduated from Harvard and six from Yale; others graduated from Princeton, the University of Pennsylvania, Oxford, Edinburgh, Halle, Middle Temple, and an unidentified Scottish college. In total, 14% had attended college, which the bottom half of Table 2 shows was more than 500 times the percentage of Americans enrolled in college in 1800. In addition, several eighteenth-century magazine founders worked in higher education: two taught at Harvard, one at Yale, two at Columbia, and one at the University of Vermont. Several others were renowned for their erudition. For example, the Reverend Samuel Williams, who launched an eclectic magazine with heavy literary component, was commonly called "the most learned man in Vermont," John M'Culloch, who founded a religious monthly, compiled the first American history textbooks, and Lewis Nicola, who founded a general-interest magazine, was a prominent engineer and founder of an early circulating library.

Not surprisingly, given the small population of eighteenth-century America – barely 900,000 in 1740, rising to 5.3 million by 1800 – many eighteenth-century magazine founders were closely connected to other members of the cultural, political, and economic elite. Among them were a nephew of Andrew Bradford (William Bradford, a printer, newspaper publisher, and founder of a prominent American coffee house) and a host of men who had close relationships with Benjamin Franklin: his friend James Parker, a prominent colonial-era printer; a nephew, Benjamin Mecom; his business partner Anthony Ambruster; his protégé Mathew Carey; and his former apprentice Enoch Story. The illustrious printer-*cum*-publisher, Isaiah Thomas, was followed into magazine publishing by a former partner (Elisha Waldo), a close friend (Colonel John Fellows), and six former apprentices. David Austin, a protégé of the great evangelical theologian Jonathon Edwards, launched two religious magazines, as did William Weyman, son of the prominent Episcopal minister Robert Weyman; Samuel Harrison Smith, the son of Revolutionary-era politician Jonathon Bayard Smith, founded a highly regarded literary review.

Eighteenth-century magazine publishing was confined almost exclusively to the Northeast. The three major publishing centers of New York, Boston, and Philadelphia accounted for over half of all magazines. However, the rural Northeast also hosted many eighteenth-century magazines:

almost one-quarter were published in Northeastern towns with fewer than 2,500 inhabitants. In contrast, only nine magazines were founded in the South; of these, four were launched in Charlestown and two in Richmond, both major urban centers.

In sum, eighteenth-century magazine founders were drawn from the privileged few. Two segments of the elite were predominant: printers and allied tradesmen (the landlords of the public sphere) and educated elites (patrician professionals and scholars). These men were often closely tied to each other and to other elites through family, work, and friendship, and most lived in the three major Northeastern cities and neighboring areas.

The mid-nineteenth century. The contrast between mid-nineteenth-century magazine entrepreneurs and their eighteenth-century predecessors was in some ways quite stark. As reported in Table 1, these people were so ordinary that we were unable to find any background information on 21 of the 125 we could identify by name. The fraction of founders with no biographical data quadrupled between the two time periods; as Table 1 shows, this was a statistically significant increase. Although even the most thorough searches are doomed to be incomplete, given the scattered records available, the contrast between the general notoriety and full archival coverage of eighteenth-century founders and the greater obscurity and sparser archival coverage of their midnineteenth-century successors is striking.

Of those whose primary occupation we could pinpoint, there were significantly fewer printers among the nineteenth-century founders. This decline may stem from the shift in printers' status from proprietors to employees; it also suggests the declining importance of controlling the means of production as those means diffused widely. In contrast, magazine founders' representation in other publishing trades remained constant, which demonstrates that the resources possessed by other industry insiders remained valuable. In addition, the proportion of magazine founders who produced content increased significantly, which reflects the professionalization of authorship in America (Charvat 1968). By the mid-nineteenth century, much literature was produced by people who earned a living from their writing, selling to book and magazine publishers

who in turn sought to earn profits by selling to mass audiences. Some of these professional writers appear to have attempted to remove the middlemen by launching their own magazines.

The proportion of doctors and ministers, the two professions whose status was the most contested, increased significantly. There were fewer members of the legal profession, although that difference was not significant. Even after taking into account the increasing prevalence of professionals, the representation of professionals among magazine founders rose substantially: midnineteenth-century magazine founders were 115 times more likely to be professionals than the average American, compared to 66 times for eighteenth-century founders. These trends indicate that members of the increasingly contested professions used magazines to support themselves financially, to defend their intellectual or denominational positions, and to build communities of like-minded associates. The variety among doctors and ministers in the mid-nineteenth-century sample was striking. College-educated allopaths vied with Thomsonians and botanists, homeopathscum-pharmacists, physicians-cum-dentists, and physical-culture advocates. The minister-founders represented a wide array of faiths: Presbyterian, United Church of Christ, Baptist, German Reformed, Methodist, Universalist, Moravian, Christian Congregation, Seventh-Day Adventist, Norwegian and German Lutheran, Jewish, and spiritualist. A full 70% of nineteenth-century physician-founders were affiliated with less-prestigious specialties or highly contested medical schools, while 74% of minister-founders were members of upstart revivalist faiths (including two spiritualists). Moreover, one-quarter of magazines founded by ministers were published in languages other than English, which indicates that they served low-status immigrant communities.

Evidence for expanding participation in magazine publishing is partly reinforced by the analysis of education. While college enrollments exploded, the proportion of college-educated founders remained constant. Although mid-nineteenth-century magazine founders were 160 times more likely than the average American to have attended college, that ratio was 70% less than in the eighteenth century – a statistically significant difference. This suggests that cultural refinement and social connections, although still quite valuable, may have become less important for launching

magazines. Combined with trends in occupation, this indicates that access to magazine publishing spread beyond powerful elites and industry insiders.

Several mid-nineteenth-century magazine founders came from modest backgrounds and made their reputations and fortunes through their periodicals. Thomas Hamilton, an African-American whose father was a carpenter and who received little formal education, founded the *Anglo-African Magazine* (1859-1860), which made him a leading voice among anti-slavery advocates. Similarly, Timothy Shay Arthur, a miller's son who worked for wholesalers and insurance companies before he began to write fiction, published *Arthur's Home Gazette* (1850-1854) and several other eponymous periodicals that showcased his work; he was "not only the most published American fiction writer in the century; his sales of more than a million copies indicate that he was also one of the most popular American authors of his time" (*American National Biography* 2000). This is a turnaround from the situation a half-century earlier, when pioneering magazine editors and publishers relied on their resources as printers or their reputations as learned men to sustain their periodicals.

Yet there were still many members of the social elite among mid-nineteenth-century magazine founders. Theodore Dwight, Jr., son of Theodore Dwight Sr., nephew of Aaron Burr and Yale President Timothy Dwight, Yale graduate, author of many popular books and prominent journalist, launched his eponymous *Dwight's American Magazine & Penny Paper* as a vehicle for his own writing. Ormsby Macknight Mitchel, West Point graduate, astronomer, professor at Cincinnati College, and member of the American Academy of Arts and Sciences and the literary Semicolon Society, published the *Sidereal Messenger*, the first scientific astronomy journal. Alexander Lyman Holley, metallurgical engineer and son of the Governor of Connecticut, partnered with Zerah Colburn, a mechanical prodigy who published a standard textbook on steam locomotive design at the age of 22, to launch *American Engineer*.

By the mid-nineteenth century, magazines had become far more widespread, being published in 26 states and territories plus the District of Columbia. The fraction of magazines in the three major publishing centers dropped to just over one-third; only New York maintained a share of new

magazines comparable to what it had in the eighteenth century. Mid-size urban areas like Fort Wayne, Indiana, and Galveston, Texas, saw the greatest increase in magazine publishing, from 18% to 44%. The fraction of magazines published in rural areas dropped only slightly, from 26% to 20% of magazines, despite the fact that America experienced its most rapid period of urbanization in the four decades before the Civil War (Warner 1972). Taken together, this set of results indicates that even as mass publishers appeared in Boston, New York, and Philadelphia, industry outsiders became more common among magazine founders.

Summary. Two trends are evident. First, magazine founders in were drawn from an increasingly broad swath of American society: more people from outside publishing, more from outside the major publishing centers, and more from the increasingly contested medical and ministerial professions. At the same time, however, the college-educated and members of the publishing trades became less common among magazine founders, although their numbers were still disproportionate to their representation in the population at large. The preponderance of evidence suggests that the development of magazines from the eighteenth to the mid-nineteenth century widened rather than narrowed access, but the evidence is ambiguous.

This ambiguity is clear among magazines launched by organizations. Seventeen of the 150 mid-nineteenth-century magazines we studied were affiliated with formal organizations: the New Jersey Historical Society, the Cherokee Georgia Baptist Convention, the Association of Working Women and Men, the faculty of a medical college, the Sons of Temperance, two teachers' associations, two literary societies, and eight groups of college students. This is a significant increase from the situation in the eighteenth century, when four out of 148 magazines were launched by organizations. This demonstrates the growth of a modern "society of organizations" (Perrow 1991). Nearly all of these organizations were populated by professionals or the highly educated. One other organization that founded a magazine in our sample, the Sons of Temperance, was a federated entity with nested local, state, and national chapters that was directed in a top-down fashion by elites (Skocpol 1997; Skocpol *et al.* 2000). Only the presence of a workers' association and the Cherokee Baptist convention among the organizations sponsoring magazines in our sample indicates

participation by non-elites. Overall, the increased number of magazines affiliated with formal organizations represents intensified participation by educated elites and embattled professionals, rather than participation by people in all social positions.

Multivariate Analysis

Multivariate analysis of relationships between founders' status characteristics and time helps clarify the univariate trends. Table 3 shows the table cross-classifying magazines according to the presence or absence of a founder with a professional occupation (**P**), the presence or absence of a founder in the publishing trades (**B**), the presence or absence of a founder with a college education (**C**), whether or not the magazine was published in a major publishing center (Boston, Philadelphia, and New York) (**L**), and time period (**T**). There are 16 combinations of P, B, C, and L, and thus 16 rows in the table. The first four columns indicate whether the predictor variables are coded zero or one. For instance, in the first row of Table 3, all four variables are coded zero, indicating magazines located outside the major publishing centers with no members of the publishing trades or the professions on their founding teams and no college-educated founders. The next two columns report observed counts of magazines with each combination of these four variables in the two time periods. The last two columns report estimates of expected frequencies, based on an unsaturated model we selected because it is the most parsimonious model that fits the data best. This model fits the following marginals: {PBCL} {PBT} {PCT} {PLT} {BCT}.

[Table 3 about here]

Table 4 demonstrates why we selected this model; it presents a series of log-linear models of increasing complexity. For each model, we list the marginals fitted, note the degrees of freedom, and assess fit. Model 7 is the selected model. It contains four three-way interactions (PBT, PCT, PLT, and BLT) and fits the data very well: likelihood-ratio χ^2 =2.63 (df=7, p=0.917), goodness-of-fit χ^2 =2.78 (df=7, p=0.905). Among the models with df=7, this model has the best fit to the data. All simpler models have significantly worse fit to the data.

[Table 4 about here]

Given the small sample size, tests based on χ^2 statistics are merely suggestive. In such situations, the estimated parameters obtained from the saturated model, which contains all possible parameters, can be used as a rough guide to which parameters should be included in the selected unsaturated model (Goodman 1970). Accordingly, Table 5 presents effect estimates from the saturated model in column 1. It confirms our analysis of Table 4. In the saturated model, BLT and CLT are the two-factor effects on T that are closest to zero, so a model that drops them, as does model 7 in Table 4, is likely to fit the data well. This conclusion is bolstered by the close correspondence between observed frequencies and estimated expected frequencies in each row of Table 3: for the eighteenth century, the average of the absolute percentage difference between the observed and estimated expected values was just 3.8%; for the mid-nineteenth century, it was 5.9%.

[Table 5 about here]

Column 2 of Table 5 presents the estimated effects of all parameters in the selected model. Both the professional and publishing-trades occupations (PT and BT) have negative main effects on the odds of a magazine appearing in the mid-nineteenth century rather than the eighteenth century, but the effect for publishing trades is only half the size of the effect for professional occupations. Location in one of the major publishing centers (LT) has a small negative effect on these odds. The main effect of founders' education (CT) is close to zero, indicating that magazines in the second period were no more likely to have college-educated founders than those in the first. This pattern of results differs from the univariate analysis, which showed that the likelihood of having a professional founder increased, while the likelihood of having a founder in the publishing trades or with a college education remained constant, and the likelihood that a magazine was located in a major publishing center decreased.

Differences between the univariate and multivariate results are due to interactions between the professional and publishing trades occupations, between both occupations and college education, and between the professional occupation and location. We discuss each interaction in turn. Having founders who were both professionals *and* in the publishing trades (PBT) increased the odds of a magazine appearing in the mid-nineteenth century rather than the eighteenth century.

While the members of each occupation on its own became less likely to found magazines (the main effects for both occupations are negative), members of the two occupations became more likely to found magazines together (the interaction is positive). This suggests that the resources attached to these two occupations became increasingly complementary. Next, having college-educated founders and professionals (PCT) and college-educated founders and founders in publishing (BCT) decreased the odds of a magazine appearing in the mid-nineteenth century rather than the eighteenth century. This indicates that although magazine founders without a college education did not increase overall (based on the near-zero main effect of education), they were the most rapidly expanding subgroups of magazine founders within these two occupations.

Finally, location interacted with occupation: having a professional founder *and* being located in a major publishing center (PLT) decreased the odds of a magazine being published in the midnineteenth century rather than the eighteenth century. Note that neither the publishing-trades occupation nor college education interacted with location (BLT and CLT were dropped from the selected model). Taken together, these results suggest that *only* those magazines with professionals among their founders became more geographically dispersed, while magazines with members of the publishing trades and college-educated men remained just as concentrated in the major publishing centers as in the eighteenth century.

Discussion and Conclusion

Our analysis shows that as the first mass-market magazines appeared, people from an increasingly broad swath of American society were able to launch new magazines. This happened because the rise of mass-market magazines occurred as magazines became legitimate cultural products and industry-specific resources became widespread, so magazine founders had little need to rely on markers of elite status to gather the resources needed to launch new ventures. In the eighteenth century, when magazines were novel cultural products, finding skilled printers, obtaining original content, securing distribution, and attracting readers demanded heavy investment of economic, cultural, and social capital. Thus, most early magazine founders were printers or other

members of the publishing trades – men who had the experience and connections necessary to secure scarce and hard-to-manage production resources. As the landlords of the eighteenth-century American public sphere (Wroth 1931; Everton 2005), these men were also cultural arbiters, so they were well-positioned to acquire content, gain access to distribution channels, and attract audiences. Other elites who had access to the eighteenth-century American public sphere were common among magazine entrepreneurs: patrician professionals and men of letters, who possessed the knowledge and cultivation necessary to provide content and attract a similarly elite audience, and the economic resources needed to underwrite such risky ventures. Skeptics could be persuaded of the merits of these unusual new products by judging not the legitimacy of the products themselves, but by the stature of the men who created them.

By the mid-nineteenth century, the greater legitimacy accorded to magazines made it easier to launch and run magazines. Distribution through the mail was guaranteed by law and postage rates for magazines were almost as low as for newspapers. Printing had been transformed from a skilled craft into factory work. Professional writers were eager to contribute original material for pay, and copyright law was used by publishers to safeguard their investment in literary property. Accumulated experience with magazines had reduced challenges for founders: potential subscribers, writers and illustrators, financial backers, and government officials all accepted magazines as valued cultural products. As a result, access to necessary resources was easier, which meant that barriers to entry were lower in the mid-nineteenth century. That is why people from more varied backgrounds could launch new magazines. Professionals, especially small-town doctors and ministers, were most likely to take advantage of these opportunities. The publishing activities of these two groups underwent what Starr (2004: 26) termed "antagonistic expansion," as rival religious denominations and medical factions launched competing publications to criticize each other and tie their communities closer together (Hatch 1989; Goldstein and Haveman 2010). Beyond these two groups, numerous men and women without economic, political, or cultural distinction founded magazines in the mid-nineteenth century.

But access to this part of the public sphere did not expand equally everywhere. Instead, the rise of large, powerful publishing houses in the three main publishing centers – New York, Philadelphia, and Boston – meant that industry insiders (writers and members of the publishing trades) were far more likely to launch magazines in those locations. Magazine founders outside the publishing industry, elite professionals and non-elites alike, often worked outside the major publishing centers. Thus, any analysis that focused exclusively on founder status (occupation and education) and ignored location would yield a false picture of how access to the public sphere evolved. The rise of large publishing houses in New York, Philadelphia, and Boston may have excluded some people from launching new magazines; indeed, magazines founded in these cities in the mid-nineteenth century were likely to be elites – to have worked in publishing or be college educated. But such competitive exclusion appears to have been limited in its geographic reach: in the mid-nineteenth century, far more magazines were founded by publishing-industry outsiders working far from these centers than by publishing-industry insiders within them. Magazines with professionals among their founders were less likely to be located in the major publishing centers and more likely to be located in other urban or rural areas in the mid-nineteenth century. This was especially true for magazines founded by clergy: in the mid-nineteenth century, magazines founded by clergy constituted 24% of the sample, but only 5% of those were located in the major publishing centers. All of this suggests that the greater legitimacy afforded to magazine publishing by the midnineteenth century allowed founders with less resources to launch magazines more easily than they could have in the eighteenth century.

Directions for future research. More work remains to be done to confirm these claims. It is unclear whether nineteenth-century entrepreneurs founded their magazines for the same reasons as their eighteenth-century predecessors. An analysis of magazine genre, for instance, would help us understand how the quality and goals of this form of active participation in the public sphere evolved. Alternatively, an analysis of editorial statements and prospectuses would shed light on how founders' motivations for their publishing ventures evolved.

Conditions in the United States may have been particularly favorable the broadening of active participation in the public sphere when mass media first arose, so the results of this analysis may not generalize to other countries. First, because the state tolerated – even invited – free expression of public opinion, it built a strong postal network that made the distribution of magazines increasingly cheap, fast, and reliable. Second, the presence of a highly literate, politically active, and geographically dispersed population fed demand. Comparative research is needed to tease out the effects of these factors on expanding participation in magazine publishing and other civil-society institutions.

Finally, research on entrepreneurship in other, more contemporary settings, could follow our lead and explicitly take into consideration how opportunities and constraints on entrepreneurship co-evolve with industry structure. Our research indicates that the development of one new media technology, magazines, was compatible with the development of both influential mass-market publications and the partial democratization of media entrepreneurship. The most obvious place for applying further testing our ideas is with new media: Internet periodicals, blogs, video-sharing sites like YouTube, and social-networking sites like Facebook and MySpace. Despite much attention to the "digital divide" – the fact that people in different social positions have different levels of access to the Internet – there has been little research on who is able to add content to the Internet. Three recent studies of video-sharing (Hargittai and Walejko 2008), blogs (Hindman 2008), and a variety of other content provision activities (Schradie 2010) have found that, similar to what we found for an "old" new medium, content production early in the history of new media tended to be restricted to industry insiders and the highly educated. But more remains to be done to see how such active participation in such "new" new media evolves as communications technologies and new-mediaindustry structures mature. Will access open up as it did for magazine-industry founders? Or will access be constrained by some twenty-first-century version of location – perhaps location in a web of social relations, rather than in geographic terms?

Our work also has clear relevance for participation in new enterprises outside media industries. This relevance is reinforced by the fact that over last three decades, organizational

theorists have seen a dramatic shift in basic research questions, from explaining cross-sectional variation in organizational structure and performance, to emphasizing time and change. Such explanations must explicitly recognize the role of time and place – in short, make organizational research more sensitive to history. Despite the appeal of a shift toward historically sensitive analysis, only a handful studies of new-venture creation reflect this shift (e.g., Djelic and Ainamo 1999; Johnson 2007). The analysis presented here could be replicated and extended in other industries – not just in "new" new media industries, but also in many manufacturing and services industries. It would be good to know whether opportunities for entrepreneurship in general broaden as industries mature, as their organizational forms and products become legitimate, and as deep pools of industry-specific resources develop, or whether such opportunities narrow as some industry participants grow large enough to erect high barriers to entry. It would also be good to know how the geography of entrepreneurial opportunities varies over industry history. The answers to such questions could help policy makers to develop more effective stimuli for entrepreneurs.

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Table 1: Descriptive Statistics on Our Samples

	18 th Century	19 th Century	Significant Difference?	
# magazines in sample	148	150	_	
# magazines with unknown founders	5 (3.4%)	25 (16.7%)	-2-115+++	
# magazines with known founders	143 (96.6%)	25 (16.7%) 125 (83.3%)	$\chi^{-}=14.5^{+++}$	
# founded by individuals	139 (97.2%)	17 (13.6%)	2—10.0***	
# founded by organizations	4 (2.8%)	17 (13.6%) 108 (86.4%)	$\chi = 10.8^{+++}$	
# with known individual founders – no info	3 (1.8%)	21 (16.8%)	2-21 0***	
# with known individual founders – info available	162 (98.2%)	21 (16.8%) 104 (83.2%)	χ -∠1.0***	

Note: ** indicates p<0.001. For the two tables that contain cells with fewer than five observations, p values are based on the Fisher's exact test instead of the usual χ^2 test.

Table 2: Magazine Founders' Social Positions and Magazine Locations

	18th Century	19th Century	χ ²
Occupation	162	103	
Publishing trade	109 (67.3%)	21 (20.3%)	55.4***
Printer	81 (50.0%)	4 (3.9%)	61.5***
Other publishing trade	28 (17.3%)	17 (16.5%)	0.03
Writer	6 (3.7%)	15 (14.6%)	10.2**
Professional	30 (18.5%)	46 (44.6%)	21.0***
Minister	14 (8.6%)	24 (23.3%)	11.0**
Lawyer	12 (7.4%)	4 (3.9%)	1.4
Doctor	4 (2.5%)	18 (17.5%)	18.6***
Other	17 (10.5%)	21 (20.3%)	5.0*
Education			
College education	22 (13.6%)	17 (16.3%)	0.39
Location			
Boston, New York, or Philadelphia	82 (55.8%)	53 (36.1%)	
Other urban area	27 (18.4%)	65 (44.2%)	23.1***
Rural area	38 (25.9%)	29 (19.7%)	
Professional Occupation			
% professionals in the population	0.29%	0.39%	
% magazine founders who are professionals		115	
% professionals in the population	66	115	
College Education			
% college students in the population	0.027%	0.100%	
% magazine founders with college education % college students in the population	519	160	

Note: Each founder's social position is assessed before he/she founded his/her first magazine. The analysis of occupation for the mid-nineteenth-century sample does not include William August Munsell, who was eight years old when he started his magazine. We analyze each occupation separately. For each, we show the frequency of magazine founders in the focal occupation; the omitted reference category is the frequency of magazine founders in other occupations. For the analysis of education, we show the frequency of magazine founders with college education; the omitted reference category is the number of magazine founders with no college education. For the analysis of location, there is no omitted reference category. For the analyses of occupation and education, df=1; for the analysis of location, df=2. * indicates p<0.05, ** p<0.01, and *** p<0.001. For tables that contain cells with fewer than five observations, p values are based on the Fisher's exact test instead of the usual χ^2 test.

Table 3:

Observed and Estimated Frequencies of Magazines with Known Founders,

Categorized by Four Status Characteristics and Time Period

Status Characteristic Value		Observed Frequency		Expected Frequency			
P	В	C	L	18th c.	19th c.	18th c.	19th c.
0	0	0	0	3	9	3.26	8.74
0	0	0	1	2	6	1.74	6.26
0	0	1	0	0	0	0.00	0.00
0	0	1	1	0	1	0.00	1.00
0	1	0	0	45	10	44.7	10.3
0	1	0	1	51	16	51.3	15.7
0	1	1	0	0	0	0.00	0.00
0	1	1	1	4	4	4.00	4.00
1	0	0	0	4	18	4.15	17.8
1	0	0	1	6	5	5.85	5.15
1	0	1	0	1	6	1.90	5.10
1	0	1	1	8	3	7.10	3.90
1	1	0	0	1	5	0.49	5.51
1	1	0	1	1	4	1.51	3.49
1	1	1	0	5	1	4.46	1.54
1	1	1	1	6	1	6.54	0.46

Note: **P** indicates the presence or absence of a professional on a founding team, **B** the presence or absence of a member of the publishing trades on a founding team, **C** the presence or absence of someone with a college education on a founding team, **L** whether or not a magazine was founded in one of the major publishing centers, and **T** whether a magazine was founded between 1741 and 1800 or between 1840 and 1860. Expected values are based on a model that includes the following marginals: {PBCL} {PBT} {PCT} {PLT} {BCT}.

Table 4: Log-Linear Models of the Effects of Professional and Publishing Trades
Occupations, College Education, and Location on Time Period

Model	Marcinala fittad	Degrees of	Likelihood-	Goodness-
Model	Marginals fitted	freedom	ratio χ²	of-fit χ^2
1	${PBT}{PCT}{PLT}$	8	8.55	9.60
2	${PBT}{PCT}{BCT}$	8	10.05	7.81
3	$\{PCT\}\{PLT\}\{BCT\}\{BLT\}$	7	12.81†	12.74†
4	${PBT}{PLT}{BCT}{BLT}$	7	14.13*	15.24*
5	{PBT} {PCT} {BCT} {BLT}	7	3.50	3.51
6	${PBT}_{PCT}_{PLT}_{BLT}$	7	6.94	6.25
7	${PBT}_{PCT}_{PLT}_{BCT}$	7	2.63	2.78
8	$\{PCT\}\{PLT\}\{BCT\}\{BLT\}\{CLT\}$	6	12.53†	12.30†
9	${PBT}_{PLT}_{BCT}_{BLT}_{CLT}$	6	12.95*	13.13*
10	{PBT} {PCT} {BCT} {BLT} {CLT}	6	2.10	2.14
11	{PBT } {PCT} {PLT} {BLT} {CLT}	6	6.84	6.17
12	{PBT} {PCT} {PLT} {BCT} {CLT}	6	2.45	2.77
13	$\{PBT\}\{PCT\}\{PLT\}\{BCT\}\{BLT\}$	6	1.32	1.27
14	$\{PBT\}\{PCT\}\{PLT\}\{BCT\}\{BLT\}\{CLT\}$	5	1.06	1.07

Note: P indicates the presence or absence of a professional on a founding team, **B** the presence or absence of a member of the publishing trades on a founding team, **C** the presence or absence of someone with a college education on a founding team, **L** whether or not a magazine was founded in one of the major publishing centers, and **T** the whether a magazine was founded between 1741 and 1800 or between 1841 and 1860. Each model also fits {PBCL}. † indicates p<0.10, * p<0.05.

Table 5: Estimates of Main Effects and Interactions: The Saturated Model and the Best-Fitting Unsaturated Model

Variable	1	2
Т	0.54	0.35
PT	-0.43	-0.27
BT	-0.73	-0.56
CT	0.30	0.09
LT	0.36	-0.16
PBT	0.57	0.43
PCT	-0.73	-0.58
BCT	-0.53	-0.38
PLT	-0.66	-0.23
BLT	-0.36	
CLT	0.46	
PBCT	0.16	
PBLT	0.62	
PCLT	-0.52	
BCLT	-0.48	
PBCLT	0.55	

Note: P indicates the presence or absence of a professional on a founding team, **B** the presence or absence of a member of the publishing trades on a founding team, **C** the presence or absence of someone with a college education on a founding team, **L** whether or not a magazine was founded in one of the major publishing centers, and **T** the whether a magazine was founded between 1741 and 1800 or between 1840 and 1860. The estimates in column 1 are based on the saturated model; those in column 2, on model 7 from Table 4.