

Only 15 Minutes? The Social Stratification of Fame in Printed Media

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Abstract

Contemporary scholarship has conceptualized modern fame as an open system in which people continually move in and out of celebrity status. This model stands in stark contrast to the traditional notion in the sociology of stratification that depicts stable hierarchies sustained through classic forces such as social structure and cumulative advantage. We investigate the mobility of fame using a unique data source containing daily records of references to person names in a large corpus of English-language media sources. These data reveal that only at the bottom of the public attention hierarchy do names exhibit fast turnover; at upper tiers, stable coverage persists around a fixed level and rank for decades. Fame exhibits strong continuity even in entertainment, on television, and on blogs, where it has been thought to be most ephemeral. We conclude that once a person's name is decoupled from the initial event that lent it momentary attention, self-reinforcing processes, career structures, and commemorative practices perpetuate fame.

Keywords

news, fame, stratification, inequality, mobility, cumulative advantage

In the long-standing tradition of stratification research, one major source of power and status has been virtually ignored, until recently: fame. People aspire to fame, just as they aspire to political power, wealth, income, education, and health. Moreover, fame affects social disparities in these other resources in significant ways. Yet, whereas sociologists have extensively investigated inequalities along these other dimensions, the differential allocation of public visibility and attention to members of a society is only now beginning to attract significant scholarly interest.

Sociologists in the emergent field of fame and celebrity (Ferris 2007) converge on the view that public attention to people is highly volatile (Bell 2007; Boorstin 1961; Cowen

2000; Ferris 2010; Gamson 1994; Gitlin 1998; Kurzman et al. 2007; Marshall 2004; Milner 2005, 2010; Rojek 2001). Herd dynamics among audiences, bandwagon effects in the diffusion of stories, and copy-cattling in newsrooms fuel spiraling media coverage and public discussion. This gives rise to hypes and bubbles that combine high

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inequality with high mobility in the stratification of fame. Dedication of air time, newspaper space, and everyday conversation to different members of contemporary society is heavily skewed toward a small group of celebrities who are continually replaced. Previously unknown persons debut in the media and in dinner table conversations and are forgotten again shortly thereafter. This may happen globally through national and international newspapers and television stations as well as locally within occupational niches and subcultures, spreading through community journals and Internet blogs (Ferris 2010). In this perspective, fame exhibits both an extreme concentration of attention around a tiny selection of individuals and a high rate of turnover in this select group.

This view of an open and fluid system in which individuals readily move in and out of celebrity status has, apart from anecdotal evidence, remained empirically unsubstantiated. Yet, the notion of ephemeral fame, despite its dominant presence in our cultural repertoire of common beliefs, is at odds with the stable hierarchies that characterize traditional stratification systems as well as the routine-like character of media practices, thus rendering it much in need of corroboration. Our strategy here is to use newspaper data and operationalize fame as a person's annual volume of appearances in newspaper articles. This allows us to evaluate the degree of year-to-year mobility in fame.

In past use of newspaper data for sociological analyses, scholars have faced methodological difficulties with the aggregation of news coverage events dispersed across journals and issues. Indexing systems suffer from lack of inclusiveness, thoroughness, and consistency, while analysis of daily newspaper scans is resource-intensive (e.g., Earl et al. 2004; Wang and Soule 2012). Recently, however, scholars have made significant advances in computer automation of text analysis (Bond et al. 2003; Hopkins and King 2010; King and Lowe 2003; Leskovec, Backstrom, and Kleinberg 2009; Michel et al. 2011). We employ the *Lydia* news analysis system

(Lloyd, Kechagias, and Skiena 2005) to trace coverage histories of large numbers of randomly chosen person names in the publication records of roughly 2,200 English-language newspapers.

Tackling several methodological challenges in the use of this novel data source, we assess the degree of mobility in media coverage of person names. To our knowledge, this is the first study to systematically investigate the stratification of fame on a large scale. Our results reveal that the dynamics by which the distribution of public attention across members of society evolves from year to year differ from current consensus in the sociology of fame.

LITERATURE AND HYPOTHESES

Sociology of Fame

In colloquial speech, fame is typically used only in reference to celebrities who are talked about by millions of people across vast geographical areas (e.g., Queen Elizabeth, Tom Cruise, or Karl Marx). As a sociological concept, fame is defined as indicating a position on a continuum anywhere between being known only by family, friends, and colleagues and being world-renowned. According to Currid-Halkett (2010:29, 66), fame is "pure renown—literally the sum of all people who have heard a person's name. . . . [It is] fundamentally about sheer numbers of people who know one's name . . . measured by quantity of recognition." This definition is compatible with Braudy's (1986:608) account of fame: "In its root sense, fame means to be talked about." Conceptualization of fame as the volume of public discourse about a person is also consistent with the *Oxford English Dictionary* (2nd edition, 2011) definition of fame as "the condition of being much talked about." Sociologists explicitly do not reserve the term just for individuals who merit public attention because of some extraordinary accomplishment. Fame is used indiscriminately for people who are loved and adored and for those we collectively fear or hate (i.e., notorious or

infamous persons). Finally, as a continuous concept, fame must also include the many intermediate cases from the middle and lower echelons of the public attention hierarchy, such as “local newscasters, minor league athletes, or local politicians” (Ferris 2010:393).

Three elements make up the predominant perspective in the contemporary scholarship of fame: a mechanism of *self-reinforcement* and distributional patterns of *extreme inequality* and *high mobility*.

Self-Reinforcement

Perhaps the best-known statement on the self-reinforcing nature of fame is Boorstin’s (1961:57) definition of “celebrity” as a person who is “known for well-knownness.” As an example of this circular causality, he notes how “endorsement advertisement not only uses celebrities; it helps make them” (p. 58). In Boorstin’s view, celebrities’ “chief claim to fame is their fame itself. They are notorious for their notoriety” (p. 60).

In more recent work, Cowen (2000:14) speaks of “snowball effects,” whereby a “small initial burst of support for fame can lead to cumulative and self-reinforcing support over time.” Cowen identifies several mechanisms through which public attention may expand. When a performer shows signs of ascent, fans will jump on the bandwagon. In Rosen’s (2001:151) words, “the more others know about someone, the more it pays you to know about that person too.” In addition, “fame-producing institutions serve to strengthen reputational snowballs” (Cowen 2000:15). Fan clubs, distributors, and bestseller lists are examples of such fame-producing institutions.

Kurzman and colleagues (2007) argue that these cumulative effects continue to occur once celebrity status has been reached. This is partly because the public becomes interested in missteps and scandals involving famous individuals: “Publicizing the peccadillos of celebrities seems to help reinforce their celebrity” (p. 353). Moreover, special treatment further increases the distance between the known and unknown: “The privileges that we

grant them in person help to reinforce their superior status” (pp. 355–56).

In summary, the sociology of fame suggests that fame is subject to self-reinforcement whereby every increase leads to a greater chance for recognition in the future. This idea embodies the more general sociological concept of cumulative advantage (DiPrete and Eirich 2007; Merton 1968), which may occur through a variety of mechanisms: one journalist’s or editor’s coverage decision may spur another’s coverage decision, as suggested by models of collective action (Granovetter 1978; Marwell and Oliver 1993) and theories of institutional isomorphism (DiMaggio and Powell 1983); knowledge of persons may spread to friends-of-friends or to adjacent areas (Bass 1969; Hedström 1994; Rogers 2003; Strang and Soule 1998); success may breed further success in various career paths (Allison, Long, and Krauze 1982; Merton 1968; Restivo and van de Rijt 2012; Salganik, Watts, and Dodds 2006); and news coverage may interact with careers, whereby more visible individuals obtain more resources, which in turn spurs subsequent media attention.

Extreme Inequality

Another common observation in scholarship of fame and celebrity regards high inequality. In any public arena, most attention is directed at a very small number of individuals. Inequality in fame in some domains of public life—such as politics, religion, and the military—relates to the preexistence of structural hierarchies of importance. Occupational tenure in these positions may be of limited duration, but at any one moment a few individuals occupy ranks of extreme importance while others naturally draw much less public attention. Even in the absence of clear, generally agreed upon differences in merit and newsworthiness, self-reinforcing spirals nonetheless generate overemphasis on a small number of characters (Boorstin 1961; Cowen 2000; Gabler 1999; Gamson 1994; Gitlin 1998; Kurzman et al. 2007; Milner 2005, 2010; Rojek 2001). Fame thus follows a distribution

similar to that of prestige, which is thought to be a convex function of performance (Erickson and Nosanchuk 1984; Frank and Cook 1995; Goode 1978; Rosen 1981; Schneider 1935). It also bears resemblance to the way public attention to social problems is differentially allocated: "A very small number of social problems are extremely successful and become the dominant topics of public discourse" (Hilgartner and Bosk 1988:70–71).

Most scholars of fame see inequality as deriving from a disconnect between fame and merit. They suggest that status may become decoupled from quality through self-reinforcement (Ferris 2007; Kurzman et al. 2007; Milner 2005, 2010), as in formal models of status hierarchies (Bothner et al. 2010; Gould 2002; Lynn, Podolny, and Tao 2009). Much in the same vein, media hypes, herd dynamics, and other self-reinforcing processes (see Vasterman 2005) generate and exacerbate inequalities in public discourse, not necessarily resulting in the most accomplished being the most celebrated.

High Mobility

It is the third and final feature of fame upon which scholars' views converge that parts with a traditional understanding of stratification systems, namely that fame should exhibit high mobility. The presumed hypes and spirals of attention driven by various reinforcement processes that generate extreme inequality should also make the fame system open.

Conceptualization of fame as an open system with ready entry and exit is grounded in the notion of *ephemeral fame*. The same waves that generate sudden fame can lead journalists and audiences to just as abruptly lose interest in and abandon an idol: "Fame bubbles can burst as quickly as they formed" (Cowen 2000:15). "The ephemeral nature of fame" means "it can be attached to and detached from individuals relatively easily" (Marshall 2004). As a result, "fame moves readily and easily between the domains of the public and the private for public consumption" (Marshall 2004). In a similar vein, Ferris (2007:373) concludes that "celebrity does not usually last very long." Kurzman

and colleagues (2007:347) speak of fame as "status on speed." Fame should have become particularly fleeting in recent days: "Increasingly, the time span between the rise and evaporation of celebrity is getting shorter" (Currid-Halkett 2010:219). Some attribute ephemeral fame to the "elevation of the ordinary" (Gamson 2011:1061) or the "demotic turn" (Turner 2004, 2006) in modern celebrity culture, whereby the public becomes interested in the lives of otherwise regular persons.

The idea of ephemeral fame is echoed in today's public perception of celebrity and its volatile nature. The presumed short attention span of today's media and public is a common notion in art and entertainment (e.g., Andy Warhol's idea of "15 minutes of fame" or the movie *Chicago*). This perception is further strengthened by tabloids' in-and-out lists, informing us of who is now worthy of public attention, and who is no longer interesting. Newspaper columnists often lament the shallowness of today's culture, citing reality TV stars such as Kim Kardashian and celebrities such as Paris Hilton, and question if they deserve their fame. Both scholarly work and public discourse suggest that fame is short-lived in today's world, due to rapidly changing fashions and an unending search for the next big thing.

It is this scholarly and popular notion of ephemeral fame that has led theorists to conceptualize fame as an open system exhibiting qualitatively less stability than traditional stratification systems. In Milner's (2005, 2010:383) theory of fame as a status system, increased mobility is a defining feature: "celebrity status is likely to be less stable than more traditional forms of status." According to Rojek (2001:94), fame undergoes high mobility in "the manifold ranks of celebrity relating to sport, music, art, literature, humanitarianism, politics and the other institutions of modern culture. Within these ranks, upward and downward mobility is a continuous characteristic of the status hierarchy to which celebrity watchers, and the general public, are perpetually attuned." Fame is "much more openly linked to economic and political power" (Milner 2010:382) and, like charisma

(Weber 1966), has a “flexible association with wealth” (Ferris 2007:373), allowing it to escape the strong persistence and immobility that the stratification of wealth exhibits; it is “unstable” (Ferris 2007:373). Kurzman and colleagues (2007:347) describe fame’s relative mobility as a characteristic feature that makes it distinctly different from other forms of power, resources, and status: “It demands a constant supply of new recruits, rather than erecting barriers to entry.” Based on this, we derive the following hypothesis:

Hypothesis 1: Unlike other stratification systems, the distribution of fame exhibits *high mobility*. There exists little overlap between individuals who receive the most public attention in one year and those who receive it the following year.

Low Mobility

Scholars of fame concur that fame should exhibit high mobility, but from the perspective of the sociology of stratification, the combination of self-reinforcement and high mobility is surprising. In the literature on cumulative advantage, self-reinforcement is seen as a “mechanism for inequality” (DiPrete and Eirich 2007:271).¹ If new resources are disproportionately allocated to individuals who received prior resources, then the pecking order is preserved.² For example, Merton’s (1968) classic analysis of Zuckerman’s (1967) interviews with Nobel laureates suggests a cumulative advantage dynamic in the allocation of fame to scientists (a Matthew Effect). This cumulative advantage dynamic solidifies the gap between the haves and have-nots, thus inhibiting mobility. Scholars have observed similar dynamics for the consecration of baseball players (Allen and Parsons 2006), song popularity (Salganik et al. 2006), author success (Sorenson 2007), and social status on the Internet (Restivo and van de Rijt 2012). The sociological literature on cumulative advantage and inequality suggests that in a reward system in which reinforcement is strong, mobility will tend to be low.

A second force that generates stability in stratification systems is the existence of formal and informal structures of power in a society. Higher level structural positions—whether in politics, science, or sports—tend to come with higher income, greater power, and greater media attention. The tenure associated with their occupancy guarantees a fixed rank for some period, and self-reinforcing processes may, at the end of tenure, convert the experience gained and power accumulated into a follow-up position of importance. Furthermore, network connections built with peers at the same stratum of power may provide indirect means of maintaining prominence. In the context of art, Lang and Lang (1988:95, 97) speak of a “satellite effect” and “elite connections” to other famous artists that enhance legitimacy (Schmutz and Faupel 2010) and ultimately help preserve an artist’s oeuvre. At the highest fame strata, endorsement of political candidates and commercial products, as well as charities and social movements that bring in famous individuals, provide means for perpetuating celebrity status (Meyer and Gamson 1995). Furthermore, theories of status suggest that status is borrowed from one’s social contacts (Bothner et al. 2010; Graffin et al. 2008; Podolny 1993, 2001). Members of status groups may thus reinforce one another’s status through isolation from those who lack status. Scholars of fame have indeed noted such strong homophilous interaction patterns (Lazarsfeld and Merton 1954; McPherson, Smith-Lovin, and Cook 2001) among the famous (Alberoni 1972; Collins 1998; Currid-Halkett 2010; Kurzman et al. 2007; Milner 2005, 2010).

The idea of high mobility in fame is not only at odds with a classic understanding of stratification systems, but it also conflicts with scholarly insights into how individuals in fame-producing positions act. In the domain of artistic reputation and renown, a key determinant of posthumous acclaim is the survival of artistic materials (Lang and Lang 1988; Taylor 1996). Consequently, curators and collectors play a central role because they “vie with one another for the contents of a newly deceased

artist's studio, if he is already famous, while things left by another who is equally talented will disappear because they have no value" (Lang and Lang 1998:105). Moreover, "ambiguities with regards to authorship tend to be resolved in favor of the more renowned" due to the common but "false assumption that any unidentified masterpiece must be the work of a renowned master" (p. 105). The unintended consequence is again a self-reinforcing dynamic whereby "small and non-measurable differences in lifetime recognition can result in significant disparities in posthumous acclaim" (p. 106). Critics and scholars, functioning as "reputational entrepreneurs" (Fine 1996:1159; see also Shrum 1991), may selectively disseminate (Lamont 1987) or retrospectively consecrate work by a few key players in a field, through halls of fame or identification of "the most exemplary achievements by cultural producers" (Allen and Lincoln 2004:873) that stood the "test of time" (Becker 1982:365, cited in Allen and Lincoln 2004). This reinforces a "magical division" (Bourdieu 1984:6) between the official canon and everything else (Braden 2009; DiMaggio 1982). Established artists are often given roles of differential status at art gatherings—such as well-established poets serving as gate-keepers who advise on, edit, curate, and publish the works of their less-known counterparts (Craig and Dubois 2010)—again reproducing preexisting status differences. Finally, orchestras also serve as fame producers, perpetuating distinctions through conservative choices of works by often-played composers (Dowd et al. 2002).

A different category of fame producer is formed by individuals working in the news industry who often act in ways that should reduce mobility in the fame system. Although the literature on mass communication does not focus on fame per se, beginning in the 1970s media sociologists recognized the unequal distribution of media attention and the active role of both *news promoters* (individuals who seek media attention and their assistants) and *news assemblers* (journalists, editors, and producers) in creating this inequality (Andrews and Caren 2010; Fishman 1980; Gans 1972, 1980,

1983; Oliver and Maney 2000; Tuchman 1973). News promoters situated in positions of corporate or political power enjoy habitual access to the media and can drum up attention through press conferences and media releases, while others must resort to disruptive behavior to attract journalists' attention (Molotch and Lester 1974). Experienced organizations know how to write a good press release with vivid quotations, time major events to match news media deadlines, and notify the press in advance about upcoming events (Gamson and Wolfsfeld 1993; Oliver and Myers 1999; Salzman 1998). News assemblers, on the other end, for fear of failure, recycle past stars in new configurations and media formats, producing further stickiness in media dynamics (Bielby and Bielby 1994; Gitlin 1983). Moreover, news assemblers' limited ability to obtain information from novel sources given pressing deadlines leads them to report on *news beats* (Gans 1980; Oliver and Myers 1999); in covering a particular beat, reporters routinely attend similar events and repeatedly encounter the same individuals.

In summary, insights from the sociology of stratification, commemoration, and media, when applied to fame, suggest a dynamic contrary to the reigning consensus in the sociology of fame. Individuals who manage to gain publicity and achieve media attention are likely to sustain their high levels of coverage, while those previously judged to be of little public interest will probably be so judged again the next time around. We can thus derive the following competing hypothesis:

Hypothesis 2: Fame exhibits low mobility.

There exists a great degree of overlap between individuals who receive the most public attention in one year and those who receive it the following year.

DATA AND METHODS

Operationalization of Fame

In accordance with how the sociology of fame defines fame, we conceptualize fame as a position on a continuum between being known

only by friends and family to being world-renowned. We measure a person's fame as the number of appearances of that person's name in newspaper records. More precisely, for every day, we count the number of distinct newspaper articles in which a name appeared.³ In our analysis, we sum these daily counts over the course of a year, standardizing by annual volume, to obtain a quantity robust to the burstiness of news reporting and annually recurrent patterns of seasonality (we show that substantive results are similar when intervals shorter than a year are chosen). Annual measures are also the standard in studies of income mobility (e.g., DiPrete 2002; Shorrocks 1978). Clearly, there will be a close correspondence between how famous an individual is and how often she is regularly referenced in newspapers. Becoming renowned today is, to a great extent, determined by receiving media attention, as recognized by the long tradition of research on agenda-setting in the field of mass communication (McCombs 2004; McCombs and Shaw 1972) and in historical studies of fame (e.g., Braudy 1986). Conversely, individuals with a large public following will likely accumulate more references in newspapers. Thus, the extent to which people appear in the news likely corresponds closely with the extent to which they are on our minds and who we talk about in our day-to-day conversations, beyond our own circle of family, friends, and co-workers.

Although we believe that newspaper mentions are an appropriate measure of fame, we also recognize its limitations. Some individuals will be widely known among audiences that are less targeted by newspapers. In addition, scholars have long argued that media coverage correlates with sociodemographic variables such as ethnicity and race (Braham 1982; Entine 2000; Entman 1990; Hartman and Husband 1974; Shor and Yonay 2011), gender (Larson 2005; Russo 1981; van Dijk 1993; van Zoonen 1994), religion (Hussain 2000), and sexuality (Alwood 1996; Kielwasser and Wolf 1992). Such differences do not always correspond with differences in underlying fame. Furthermore, due to growing

competition from other media—radio, television, and more recently the Internet and social media—newspapers have lost some of their historical dominance as the primary producers and reinforcers of *knownness*.

A final objection to our operationalization may be that while coverage of persons dynamically follows the notable events in which they partake, their presence in public memory remains more constant. Maria Sharapova will draw more attention when she wins a Grand Slam tournament, Katie Holmes when starring in a newly released movie, and David Sedaris right after his latest book comes out. However, the degree to which people would affirmatively answer the question “Do you know who this person is?” may change little in between tournaments, movies, and books. If so, it means fame will appear more ephemeral in the newspaper data at hand than it actually is in society's collective mind. Hence, if we find fame to be stable in newspapers, we may expect it to be even more stable in public consciousness.

Datasets

Our data come from English-language newspapers that were scanned for person names by the *Lydia* text analysis system (for details, see Bautin et al. 2010; Lloyd et al. 2005).⁴ *Lydia* performs named entity recognition, classification, and analysis of text corpora. A named entity can generally be thought of as a proper noun, most commonly a person, place, or organization. *Lydia* employs natural language processing (NLP) to reduce text streams to time-series data on the news volume associated with each news entity and their juxtapositions in sentences, articles, and newspapers with other news entities.

Here, we analyze data collected by *Lydia* from approximately 2,200 U.S. daily newspapers, weekly and more infrequent periodicals, and a significant number of foreign English-language newspapers. Some examples are the *New York Times*, the *Guardian*, and local papers such as the *Toledo Blade* and the *Sacramento Bee*. A select list of major U.S.

newspapers is presented in Part B of the online supplement and a complete list of all English-language newspapers in the database in Part C (<http://asr.sagepub.com/supplemental>). The list includes a great heterogeneity of online written news sources, which we refer to as *newspapers*, ranging from reputable journals with nationwide circulation to college newspapers to fashion magazines to TV stations' websites.⁵ Daily data collection from these sources has been ongoing since November 2004, and a very large corpus of text for analysis has accumulated (henceforth, the Dailies text corpus). For 13 newspapers (henceforth, the Archival text corpus), *Lydia* data go back beyond 2004 because these papers have made scanned articles available.⁶

We focus most of our analysis on samples of roughly 10^5 person names randomly drawn from the Dailies and Archival corpora. We use seven distinct datasets in our analyses: (1) the Dailies dataset, containing timestamps of occurrences of random names in the Dailies corpus between November 2004 and January 2009; (2) the Archival dataset, consisting of names randomly drawn from the Archival corpus; (3) the *New York Times* dataset, which contains annual frequencies of the complete population of names mentioned in available pages from the *New York Times* in 1988, 1993, 1998, 2003, and 2008; (4) the Entertainment dataset, containing all occurrences of random names in entertainment sections of the Dailies corpus; (5) the Celebrities dataset, containing all occurrences of names that have at least 50 percent of their mentions in newspaper entertainment sections in the Dailies corpus; (6) the Blogs dataset containing all article references to names mentioned on the blog site LiveJournal; and (7) the Television dataset containing mentions of names on the websites of broadcasting corporations, such as CNN and FOX, in the Dailies corpus. We indicate the name of the respective dataset when used. To give readers a sense of what names are included in our samples, the three most highly mentioned names in the Dailies dataset are Brett Favre (prominent U.S. football quarterback), Alex Salmond (first minister of Scotland), and John

Roberts (U.S. Chief Justice). Note that the reason a name like George W. Bush is not in this list is that we did not draw a random sample of all mentions, but rather a random sample of all names. The former U.S. president was not sampled. For each name sampled, the dataset includes every mention in any newspaper.

Data Challenges to Testing the Hypotheses

Common names. One problem inherent in studying people through news is that names are not unique identifiers. References to a name in our news corpus may be references to a single person or to many people with the same name. Disambiguating references to different people with the same name is a difficult task, and one we do not attempt to achieve in this work. Instead, we verified that our results continue to hold if common names are excluded from the analysis.

We used U.S. Census data to estimate the commonality of each name in our dataset. In our estimation we made the simplifying assumption of independence of first names and surnames. We then performed analyses separately on the subsample of uncommon names, namely those with an expected frequency of one or less in the U.S. population. Of the names in our Dailies sample of 100,000, 71 percent are uncommon by this definition. None of our results for this subsample of uncommon names deviated significantly from the full sample results. We therefore omit the subsample results in the present article.

Unknown number of names that are not in the news. A second limitation of our data is that people who were never in any newspaper are not in the dataset. That is, although our samples of 100,000 names are representative of the populations of names that appeared in the respective news sources, they are not representative of any particular time- or location-specific population of names. It would be problematic to estimate what proportion of any such population of names (e.g., U.S. citizens) is in the dataset on the basis of the database's size,

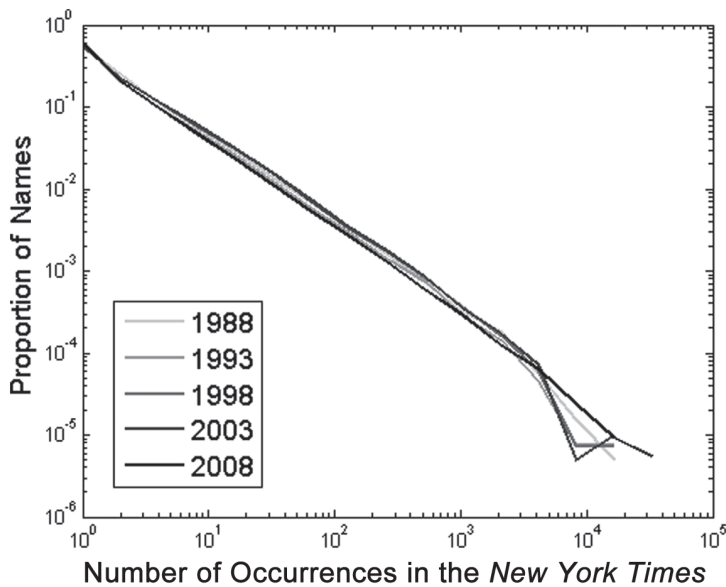


Figure 1. Distribution of Fame in the *New York Times* across Two Decades (*New York Times* Dataset)

given that some names in newspapers refer to dead people, others to people overseas, some to fictional characters from books and movies, and others to multiple distinct individuals. An alternative approach to estimating the proportion of names of any particular population in the news would be to match a random sample of names from a phone book with names in the news (see Huber 1998), but the unusual residence status of many celebrities and officials in high offices for reasons of privacy, security, taxation, and the like renders this impractical. We therefore confined our target population to all individuals who appeared in the news during the study period. We asked what patterns of stratification, mobility, and turnover can be observed within this group for which information is available.⁷

RESULTS

Distributional Analysis

Figure 1 is a double-logarithmic plot of the frequency distribution of annual coverage in our *New York Times* sample in five distinct

years spanning two decades of coverage. Use of a single newspaper in this distributional analysis permits historical comparison without the confounding effect of the changing composition of our newspaper database. The horizontal axis measures the number of newspaper references to a name. The vertical axis measures the proportion of names among the names with the respective reference volume. Most names are mentioned only a handful of times and can be found in the top left of the chart. Famous names are located in the bottom right.

All five distributions approximate a straight line with a slope of -1.1 , suggesting a power-law distribution with 1.1 as scaling exponent. Classic models of feedback produce distributions that approximate a power-law in their tail (Barabási and Albert 1999; Price 1976; Simon 1955; Yule 1925), consistent with theoretical notions of self-reinforcement and cumulative advantage in fame discussed earlier, although other processes can also produce similar heavy-tailed population-level distributions (Clauset, Shalizi, and Newman 2009; Jones and Handcock 2003; Newman 2005).

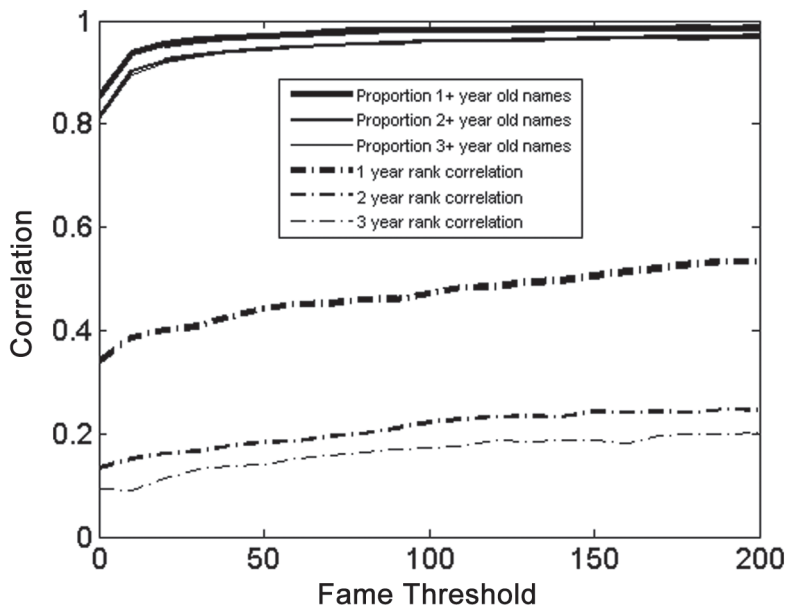


Figure 2. Biannual Correlation and Proportion Coverage of Old Names above Varying Threshold Levels of Fame (Dailies Dataset)

Apart from being consistent with the notion of reinforcement in fame, the frequency distribution indicates that fame indeed exhibits extreme inequality, whereby nearly all public attention is allocated to a highly select group of individuals from among those who receive any coverage. To give an indication of the severity of inequality in the sample, in each of the five years approximately 60 percent of all newspaper coverage goes to only 1 percent of the names.

Interestingly, this degree of inequality remained largely constant over the course of this 20-year period, with a stable fraction of newspaper space allocated to each fame stratum. The top left of Figure 1 does not show an increase in the fraction of minor names, as theories about the increased celebrification of ordinary people would suggest (Gamson 2011; Turner 2004, 2006). Nor does the bottom right of Figure 1 show a noticeable increase in the proportion of superstars (Frank and Cook 1995; Rosen 1981). Although the distribution of fame remained mostly unchanged, the composition and relative ranking of the individuals who made up this

stable distribution may have shifted dramatically from year to year, as indeed the sociology of fame predicts.

Mobility Analysis

The dash-dotted lines in Figure 2 show Spearman's rank correlation in fame across pairs of years in the Dailies dataset. The one-year rank correlation pertains to consecutive years, the two-year rank correlation to a two-year difference, and the three-year rank correlation to a three-year difference. The vertical axis measures the correlation for all names that, during the observation period 2005 to 2008, had on average at least the threshold degree of fame indicated along the horizontal axis. Figure 2 shows only a moderate correlation between fame in consecutive years. These correlations further weaken in subsequent years; the two- and three-year curves indicate significant change in annual fame ranks. Annual correlations are higher among more famous names, suggesting that fame is more stable at higher levels.

The three solid lines in Figure 2 represent the coverage of *old names*: people who were

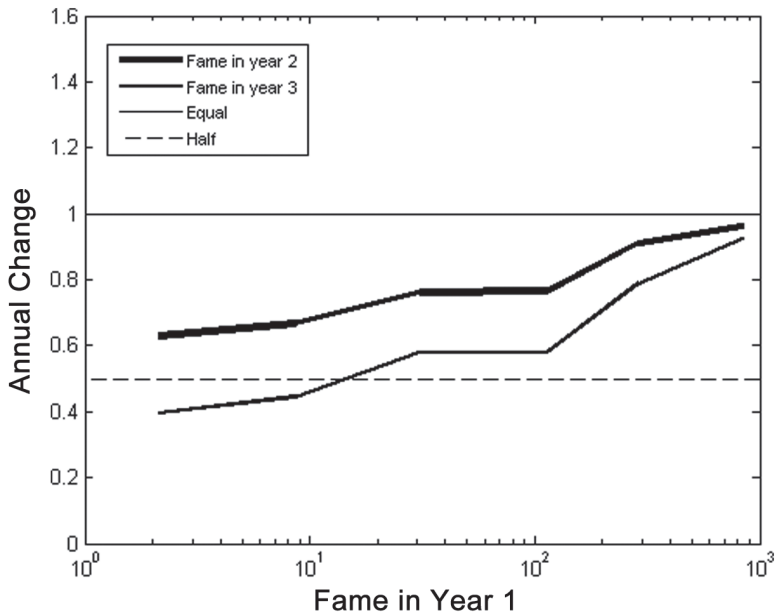


Figure 3. Annual Change at Varying Levels of Fame (Dailies Dataset)

also in the news one, two, and three years earlier. The figure shows the fraction of coverage of names that were mentioned at least once one, two, and three years earlier. We calculated this fraction for the coverage of all names with at least the threshold number of mentions in the focal year indicated along the horizontal axis. For example, the value .96 for three-year-old names at fame threshold 100 indicates that out of all newspaper coverage of names with at least 100 references in 2008, 96 percent went to names that were already in the news at least three years earlier. Figure 2 thus shows that the vast majority of coverage goes to names that have already been in the news for several years, and that new names rarely penetrate the higher strata of fame. These results suggest that although the fame hierarchy undergoes significant re-ranking from year to year, this is largely a reshuffling of already familiar names and not rapid replacement of an outgoing cohort by an incoming cohort.

The positive relationship between magnitude of fame and the age of names displayed in Figure 2 suggests that names that experience significant coverage over the course of a

year maintain much of this coverage from one year to the next. Only names that did not receive much coverage disappear and are replaced. This inference can be tested by calculating the typical fame level in a year for levels of fame in the previous year. However, because of regression toward the mean, above-average fame will drop even if change is entirely random. To reduce this bias, we examined change in fame between subsequent years after this expected initial drop.⁸ Figure 3 displays the median reduction in fame from year 1 to year 2 and from year 1 to year 3 for different levels of fame in year 0. A value of 1 indicates that fame in the destination year (year 2 or year 3) is equal to fame in year 1. As predicted, the sustenance of fame increases as we move along the horizontal axis. Small fame quickly shrinks from one year to the next, but big fame remains mostly steady from year to year.

The Role of Randomness

The strong persistence of fame at high levels in Figure 3 suggests the weak correlations in

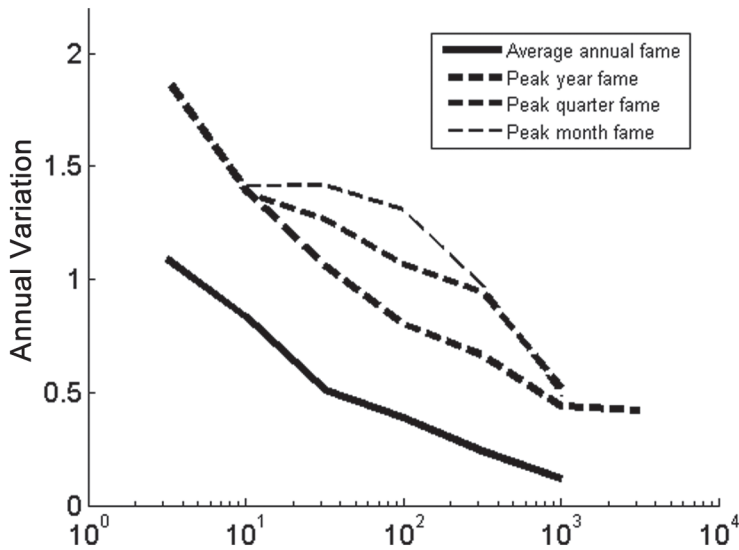


Figure 4. Annual Variation (Dailies Dataset)

Note: The measure of annual variation is the modified coefficient of variation: $(\text{variance} - \text{mean}) / \text{mean}^2$.

Figure 2 are mostly due to random, transitory fluctuation around a relatively stable level of fame (Bielby, Hauser, and Featherman 1997; Black and Devereux 2010; Rytina 1989). To explore this possibility, we calculated annual variation for each name. A natural measure of variation for count data is the modified coefficient of variation (MCOV), corresponding to the overdispersion parameter in the negative binomial distribution (Allison 1980). We computed annual variation of a name's fame as the MCOV of its annual article total. Figure 4 shows the median variation for different degrees of fame. The pattern in Figure 4 indicates that annual variation decreases with average fame, reconfirming the pattern found earlier of stratum-dependent mobility. The MCOV scores permit qualitative examination of typical variation at different levels of average fame. Whereas an annual average of a single-digit number of mentions is characterized by high variation (a four-year pattern such as 7 – 5 – 0 – 0 with MCOV = 1.1), at high levels the mobility of fame typically exhibits only moderate annual change (e.g., 1050 – 1250 – 500 – 1200 with MCOV = .12). The degree of annual variation at high

levels of fame is particularly low if one takes into account event-driven news coverage spikes even when underlying fame is robust; for example, a famous author publishing a new book or a famous actor starring in a new movie. Variation of big fame is also low given differences across newspapers in people's latent fame. Namely, such heterogeneity will produce positive MCOV values even if newspaper coverage follows a Poisson process with a fixed rate (Allison 1980), suggesting that structural change in fame is even lower than indicated by the MCOV. Results thus suggest that at significant levels of fame, annual change is close to the theoretical minimum of pure stationarity.

One may object that names that enjoy significant coverage for just a brief period should nonetheless be considered moderately famous even when their fame on an annual basis is minor. To explore to what degree annual variation depends on the length of the episode over which fame is measured, the dashed lines in Figure 4 display the degree of annual variation as a function of the number of newspaper articles in a name's peak year (thick), peak quarter (medium), and peak month

(thin). Figure 4 shows that annual variation among the most famous names varies little with episode length.

Based on the evidence presented, we may conclude that Hypothesis 1 (high mobility) from the sociology of fame characterizes fame dynamics only at low levels. Hypothesis 2 is confirmed in the dynamics for higher strata, where annual variation and mobility in fame were found low. Among individuals with a large body of mentions (those we would typically characterize as famous or renowned) mobility is low. Boundaries in the stratification system become less permeable as we move up to higher levels of newspaper coverage. Famous individuals maintain most of their fame from one year to the next, leaving little room for new arrivals.

ROBUSTNESS

The questions that naturally arise concern the robustness of these findings: To what degree does the immobility of fame vary by the type of fame, by the medium through which fame is broadcast, and by the analysis method one uses? We explore these robustness issues by considering three specific concerns that one may raise.

Concern 1: Entertainment Fame Is Ephemeral; Fame in Sports, Business, and Politics Is Durable

One possibility is that the theory of an open fame system proposed by sociologists of fame is limited in scope to the domain of entertainment, whereas fame in other domains is mostly stratified. Indeed, examples in the fame literature often come from the world of celebrity and entertainment. In news, business, and sports, formal hierarchies of importance may command unequal media attention and mobility may be low; in entertainment and arts, however, fads and fashions prevail, rendering mobility potentially higher. Our analysis has so far pooled all names irrespective of their domain, but one could argue that *the ephemeral nature of fame* implicitly excludes politicians,

public officials, CEOs of major companies, newscasters, and major league athletes. Instead, scholars may implicitly reserve the phrase for actors, performers, and presenters. This raises the possibility that the pattern of stratum-dependence observed earlier may represent a combination of low-mobility names in politics, business, and sports mostly at high levels of annual fame, with high-mobility names in entertainment mostly at lower levels of annual fame. Authors, actors, and artists must regain popularity after each book, movie, or CD, whereas employment in professional sports or public office guarantees consistent coverage throughout a season.

To examine such potential domain-specific mobility, we isolated entertainment-oriented news categories, in which we would expect to find higher mobility. First we performed a separate mobility analysis for names that occurred in newspapers' entertainment sections (Entertainment dataset). To verify that these sections indeed had a greater representation from the arts and show business, we inspected the top-10 names in our sample (recall that because this is a sample, these are *not* the top-10 names in the population of all names from which the sample was drawn). Table 1 demonstrates that indeed all but one (Howard Hughes) are unambiguously entertainers.

Figure 5 shows the reduction of fame from year 1 to year 2 at different levels of year 0 fame, for the Dailies dataset (solid, thick) from Figure 3 and the Entertainment dataset (dashed, thick). The lines mostly overlap. Findings for mentions in entertainment sections are similar to findings for newspaper fame in general: low levels of coverage peter out quickly but significant coverage is sustained. We also considered the Celebrities dataset, containing names for which over 50 percent of their mentions occurred in entertainment sections of newspapers (dash-dot, thin). At intermediate levels of fame—around 10^2 articles per year—we find names such as Alan LeQuire (sculptor), Anita Yavich (costume designer), and Ann Peebles (singer). Again, the pattern resembles the general pattern from Figure 3. Apparently, celebrities'

Table 1. Top-10 Names in the Entertainment Sample with Corresponding Profession

Name	Profession
Jamie Foxx	musician / actor / comedian / talk radio host
Bill Murray	actor / comedian
Natalie Portman	actress
Tommy Lee Jones	actor / film director
Naomi Watts	actress
Howard Hughes	film producer / director / entrepreneur / aviator / engineer
Phil Spector	record producer / song writer
John Malkovich	actor / producer / director / fashion designer
Adrien Brody	actor / film producer
Steve Buscemi	actor / film director

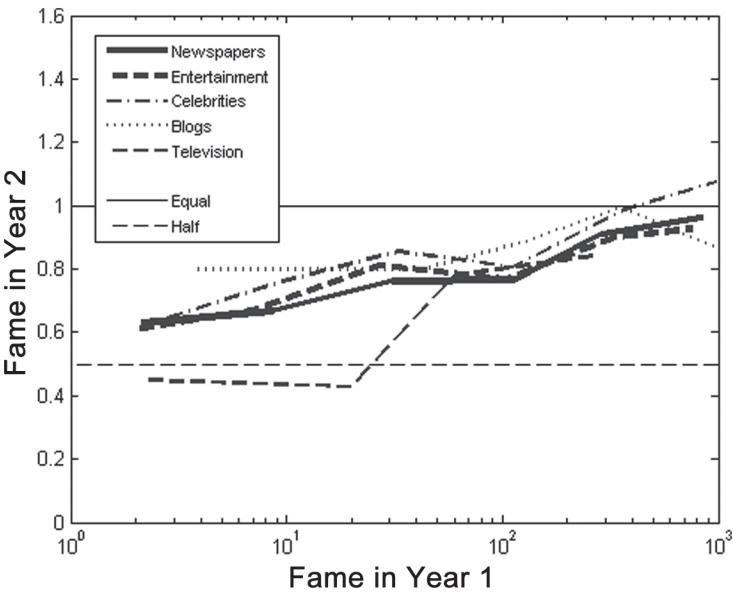


Figure 5. Annual Change at Varying Levels of Fame, by News Category and Medium (Dailies, Entertainment, Celebrities, Blogs, and Television Datasets)

fame—as thus defined—exhibits the same dynamics as that of famous people in other domains: high mobility at entry levels and low turnover at higher levels.

Although we were able to capture entertainment-oriented fame only through broad, high-level categorization, our results do suggest that in entertainment—where the media spotlight is affected more by tastes, fashion, and consumer demand than by formal, durable terms of public service—fame follows a pattern of mobility similar to that in business,

sports, and politics. Just like fame in more formal domains, fame in entertainment appears topped by a stable elite of celebrities who do not easily go away.

Concern II: Dynamics Are an Idiosyncratic Feature of Newspapers as a Medium

A second possibility is that low mobility characterizes dynamics of newspaper coverage more than it characterizes general fame dynamics.

Newspapers may bring persons to public attention in a way that is qualitatively different from other media. Newspapers may disproportionately report on fame tied to a particular public function (e.g., major league sports, politics, or artistic excellence) and on extremely minor figures such as those in obituaries, advertisements, and involved in local crime. By doing so, newspapers may underrepresent exactly the kinds of celebrities whose fame is not institutionally supported and who lack a good reason for being in the news. Perhaps other media that are not primarily concerned with news provision exhibit different dynamics.

To explore this possibility we analyzed data from two other media: blogs and television. Blogs' content is created in a distributed fashion, by unconstrained individuals and organizations that can make a name for themselves or draw attention to a person or topic of their choosing. By and large, blogs lack a formal institutionalized practice or code for granting public attention, although items and discussions that originated in other media such as newspapers, television, and radio are often re-consumed in the blogosphere (Leskovec et al. 2009). Television is perhaps different with regard to the categories of people it allocates attention to, sharing with newspapers the top-down tradition of news reporting on individuals in public office, but adding bottom-up elements such as reality TV shows featuring previously unseen characters.

Figure 5 shows fame in year 2 by fame in year 1 for names of varying fame in year 0 in the Blogs (dotted) and Television (dashed, thin) datasets. The figure shows patterns similar to those observed in newspapers: names with low frequency more readily disappear from the public eye than names that are blogged and broadcast regularly. Fame at significant levels is mostly preserved from year to year. The degree of stratum-dependent mobility appears larger for television than for newspapers and blogs; however, these fine differences may be due to variation in size and source heterogeneity across the corpora from which the datasets were taken. A conservative interpretation is that the limited data from

these other media provide little evidence for the supposition that the stickiness of famous names is unique to newspaper coverage. Rather, patterns in Figure 5 suggest it is a more general feature of fame.

Concern III: Annual Mobility Analysis Overemphasizes Stability

The pattern of low mobility at high levels of fame thus appears to robustly describe change across domains of fame (addressing Concern I) as well as across media through which fame is broadcast (addressing Concern II). The final objection we consider is that our annual mobility analysis overemphasizes stability. While the analytic approach of measuring mobility in fame as the annual change in the quantity of references accumulated is analogous to the classic measurement of income mobility as the annual change in the number of dollars accumulated, one could argue that this approach fails to capture short intense periods of fame lasting only a quarter or even just a month. Furthermore, we have shown that high levels of fame in one year tend to be maintained the year after, but it is in principle possible that most cases of fame last only briefly while a few last very long, because longer episodes by definition are more likely to have occurred during any observation window.

An empirical assessment of this objection requires a life course analysis. Just like standard income mobility analysis ignores members' individual career trajectories when calculating population-level changes, in the same way can our analysis so far say little about the average life course of individual fame. To examine a longer period of time we turned to the Archival dataset, which has several decades of scanned newspaper content. Accordingly, we calculated the typical trajectories of fame growth and decline for different levels of fame. This time, however, we measured the level of fame as the number of newspapers a name has ever appeared in, allowing even very brief fame to reach the highest level. We first defined *new names* as those that never occurred during the first 15

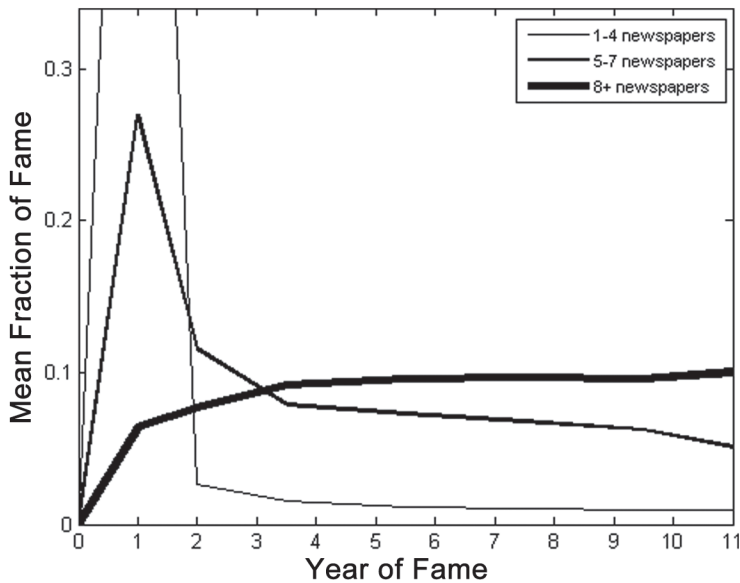


Figure 6. Long-Term Dynamics of Fame by Peak Year Fame (Archival Dataset)

years of the observation period (1977 to 1991) and only kept names “born” before 1999 so that 11 full years of coverage were available in the dataset.

For a new name’s birth year and for each of the years during the decade following that birth year, we calculated the name’s fraction of its total decennial coverage. Then we stratified names by the number of newspapers they appeared in and calculated annual means within strata. Figure 6 shows how the shape of the trajectory radically changes with the degree of fame. Names mentioned in 1 to 4 newspapers received virtually all their coverage in the first year. Qualitative inspection of these patterns confirms that many involve a burst in a single week in which all attention was granted. By contrast, names that reached the readerships of eight or more newspapers show a pattern of growth suggestive of a long-lasting, perhaps even career-transcending, trajectory of fame.⁹ The intermediate case shows an aggregate trend that suggests a mixed population of names; close examination of these data confirms that the constituent names typically follow one of the two extreme categories.

Figure 6 demonstrates that while small names quickly disappear, big names experience a career-type pattern of growth and sustenance. Contrary to what sociologists of fame argue, it is atypical to see large-scale attention to an individual during some period and hear little of this person ever after.

SYNTHESIS

News is mostly event-driven, characterized by short bursts of attention. Consumers of news (through, for example, news items, programs, movies, books, shows, and stories) are interested in two kinds of events: events that are noteworthy and events that involve noteworthy people. People involved in the former type of event (e.g., unlikely but true stories, natural disasters, reality TV shows, and crimes) were previously unknown and disappear from the public eye with the event’s passing. Some of these may fit Rojek’s (2001:20–21) category of *celetoids*, such as lottery winners, whistle blowers, sports arena streakers, “and other social types who command media attention one day and are forgotten the next.” Because the attention they draw

is limited to a single event, they tend to occupy the lower strata of the fame distribution and thus exhibit high mobility. People involved in the latter type of event include famous directors, show hosts, athletes, entertainers, politicians, authors, and musicians drawing attention wherever they go. Because of their consistent coverage they populate the upper strata of fame, rendering mobility low at these levels.

As theorized by scholars of fame, the concept of celebrity—individuals who have acquired public and journalistic interest in their accomplishments, missteps, and private affairs—fits only the latter category. Yet here we propose that fame in this category is long-lasting and is not constrained by a limited public attention span, unlike what others before us have argued. When individuals are decoupled from noteworthy events and are of interest in their own right, self-reinforcing processes, commemorative practices, reputation, and career structures prevent a return to obscurity. The events in which these people are involved are almost automatically of interest, and the attention they attract further increases interest, turning their name into a brand. Successful movie actors, entrepreneurs, authors, and athletes can do anything—write a book, host a television show, or show up at an event—and have media attention shift to them; anything they touch turns to gold and attracts the spotlight. They are creators of fame. By contrast, ephemeral fame is passive and limited to the respective event—whether it is a minor crime, a YouTube video, a nearby disaster, or a brief chance appearance on television.

Transitions between the two types of fame can occur but are unidirectional. When a previously unknown individual is involved in an event that triggers a large and long enough public conversation, or reserves a place in a series of follow-up events, the name *locks in*. Enough people now recognize the name for an audience to desire or find it natural to hear more about the person, providing an interest for media and relevant organizations to perpetuate fame. These transitions are heterogeneous and may involve career discoveries or

trigger events that receive nationwide interest: a novel becomes a success and the expectation that the public will buy large quantities of the author's next book leads publishers to offer contracts; in every high school massacre, the media refer back to a particular previous shooter; a scientist's work is commented on so widely that she is invited to comment on others' work; an unknown band is discovered through a highly successful opening act on a big tour; or a recruiter observes an extraordinary performance by a talented young athlete.

Once fame is decoupled it transcends the domain in which it was born. The perpetuation of fame does not remain restricted to a single field, like arts, politics, or sports. Even when fame expires in one field—a politician is not elected (Michael Huckabee) or an athlete retires (Michael Jordan)—it may spill over onto a different field. Follow-up positions of fame may be in an entirely different field. White House press secretaries may become contributors to major news channels (Ari Fleischer), business tycoons may present television shows (Donald Trump), movie stars sometimes transition to public office (Ronald Reagan; Arnold Schwarzenegger), and talk show hosts may publish a magazine, act in a movie, or practice philanthropy (Oprah Winfrey). A famous name has enough clout and legitimacy in one area for perpetuation in another.

Big fame appears so immobile that even a decade after birth, top names have typically not peaked yet (see Figure 6). Public attention to individuals appears qualitatively longer than the noted durability of attention to social problems. For example, Hilgartner and Bosk (1988:57) observe that "some social problems . . . maintain a position at the center of public debate for several years, then fade into the background. Others grow and decline much more rapidly." Similarly, McCombs (2004) and Vasterman (2005) show that longevity for major issues on the public agenda is in the order of a few years. In contrast, the period over which individual names emerge and decay may be more similar to the lifespan of popular baby names, which display a pattern

of growth and decline over many decades (Berger and Le Mens 2009; Liebersohn 2000; Liebersohn and Bell 1992).

A name is either limited in popularity to the event that brought it temporary public visibility or is vetted, reinforced, institutionalized, and occupies an enduring place in public memory. Nearly all public attention in any year is directed toward names that earned their place in preceding years. Some names are gradually replaced by their successors, such as with talented tennis players and politicians. Occasionally an individual crosses over more quickly, a name catches, and fame crystallizes: a reality TV show participant becomes a show host; a high school athlete wins a college scholarship, is discovered, and winds up in professional sports; playing a secondary role alongside an already famous actor jumpstarts a career in the spotlight; or being elected to public office yields a position that automatically receives public attention and a name that makes one more electable next time around. These broad dynamics allow great heterogeneity in the sources of reinforcement and perpetuation, which include hollow celebrity status but also extraordinary achievements in sports, science, and political prominence. The forces that produce sustenance may be diverse—from the demonstration of superior talent in sports, to the incumbent advantage in politics, to audiences' preference to watch movies starring actors with whom they are already familiar. Yet in each case, significant public attention is sustained for a long time. Temporary celebrity status is an exception.

CONCLUSIONS AND DISCUSSION

The social stratification of fame exhibits inertia and stability, thereby following traditional inequalities, such as in wealth, income, education, and status. It does not accord to the consensus among scholars in the field of fame and celebrity that the fleetingness of modern fame renders mobility in fame high. Rather, as our longitudinal data show, fame has low turnover except at minimal levels of public attention.

Fame's continuity is high, independently of domain. Even in areas of social life where occupational success is most determined by trends, hypes, and consumer taste and less by formal positions of public prominence—that is, entertainment, arts, and fashion—there appears to exist a similar degree of annual stability in the ranks of the celebrated. Furthermore, stickiness is similarly present among names appearing on blogs and television websites, suggesting these patterns of stability are not limited to newspaper fame. Scholars of fame and celebrity contend that modern mass media and free large-scale access to communication and information technology allow for temporary episodes of intense public celebration of formerly unknown individuals (Bell 2007; Ferris 2007; Kurzman et al. 2007; Marshall 2004; Rojek 2001). Yet, our study suggests that just like newspapers, public attention on blogs and television tends to be brief only when it is of small magnitude. However, our data on these other media were limited; more comprehensive data from blogs, television, and online video sharing applications (e.g., YouTube) must be analyzed for firmer conclusions about comparative mobility patterns and fame dynamics.

The stratum-dependent mobility of fame with greater degrees of openness at lower tiers may lead back to a dichotomization in fame, whereby public attention is granted either to people who happen to be involved in noteworthy events or to people who are of continued public interest because of the names they made for themselves. Social reinforcement, career structures, and practices of commemoration render the temporary celebrity a highly atypical case. Talent, resources, or chance events may all create a media appearance of sufficient prominence to establish a name that can count on sustained coverage. Unusually gifted people may be discovered. Highly resourceful people may acquire fame through association or appropriation. Others may climb out of obscurity through random involvement in a consequential event or a chance encounter with a person of prominence. Most other names appear at a small scale, following the event that triggered them

and disappearing shortly after. Temporal distributions of fame show a dynamic signature suggestive of this model: big names follow career-type patterns of growth, sustenance, and gradual decay over the course of decades; small names disappear instantly with the passing of the events from which they emerged.

The representativeness of these data permitted a quantitative assessment of fame mobility and the calculation of typical fame trajectories, but other aspects pose limitations that may be overcome in future work. First, in our theory of lock in, an important role is reserved for self-reinforcing processes that help produce steady trajectories of fame—alongside other stabilizing factors such as innate talent and resources as well as structural positions of public importance. Furthermore, debate about fame mobility revolves mainly around the nature of self-reinforcing processes; according to sociologists of fame, these produce openness, not stability. The high-level observational data we used ultimately cannot establish the causal mechanisms that connect past with future popularity. A promising research direction involves experimental intervention in naturally occurring online communities, in which individuals through random assignment can be granted or withheld status or popularity (e.g., Restivo and van de Rijt 2012). Treatment effects provide evidence for a significant role of reinforcement in the respective status systems. Second, an analysis of sheer reference volume cannot speak to the sentiment with which names are mentioned, leaving unanswered questions about differences between the dynamics of fame and infamy. Recent advances in automated large-scale sentiment analysis of textual data may be leveraged to this end (Godbole, Srinivasaiah, and Skiena 2007). Third, our operationalization of fame as newspaper coverage posed limitations such as the independent measurement of size and duration of fame and the burstiness and seasonality of news coverage. Longitudinal surveys asking respondents if they consider a person famous may be able to better disentangle length and magnitude of fame and may capture short-term

fame dynamics that are not subject to heavy noise.

On the theoretical side, a natural next step is translation of our conceptualization of fame into a formal model that can regenerate the main features of the observed long-term dynamics in Figure 6. Possible directions for development of such a model are growth mixture models, recently proposed mathematizations of short-term public attention bursts (Leskovec et al. 2009; Ratkiewicz et al. 2010; Wu and Huberman 2007), and models of citation dynamics.

Our theoretical synthesis shares with various other endogenous theories in the modern sociology of culture the notion that cultural dynamics may originate from within a cultural system rather than from an external source, such as structural change (Kaufman 2004; Lieberman and Bell 1992). Our theory differs in that we provide an explanation not for change but for the lack thereof. Lieberman (2000:257) concludes in his study of baby name choices: “It is in this vein that internal mechanisms can generate change in the absence of external social change.” By contrast, our analysis suggests that internal mechanisms can create *stability* even in the absence of external stabilizing forces. Fame need not become ephemeral when disconnected from fame-granting structural positions. Commemoration, cumulative advantage, conservative media tendencies, and artistic reputation may carry the status quo forward for much longer than previously thought.

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Notes

1. However, models of information cascades (e.g., Bikhchandani, Hirshleifer, and Welch 1992) suggest that mass behavior may simultaneously exhibit conformity and fragility in what people conform to, thus suggesting that cumulative advantage and high mobility can co-occur.
2. Allison and colleagues (1982) point out that cumulative advantage may either reproduce or exacerbate inequality depending on the particular mathematical specification of the reinforcement dynamics and the measure of inequality used.
3. Our results are robust to variations on this measure, such as the total number of distinct newspapers or the total number of mentions across all newspaper articles.
4. Data and analysis files can be found on the first author's website: <http://mysbfiles.stonybrook.edu/~avanderijt/>.
5. We decided to maintain this heterogeneous set of online news sources for our main analysis, relying on the quantity and reach of the database. Part A of the online supplement shows that mobility patterns are similar when only newspapers of high circulation and prestige are analyzed.
6. The 13 newspapers in the Archival corpus are, in alphabetical order, *Anchorage Daily News*, *Boston Globe*, *Dayton Daily News*, *Detroit Free Press*, *New York Daily News*, *New York Times*, *Oregonian*, *Plain Dealer*, *Press Enterprise*, *Rocky Mountain News*, *Star Tribune*, *Times Leader*, and *Washington Post*.
7. For some newspapers in our dataset, the amount of available content changes over the course of the observation period. As a result, true mobility in fame may be lower, because some apparent mobility may reflect a change in a newspaper's online coverage policy or data availability.
8. For example, if fame follows an overdispersed Poisson process with a fixed rate, regression toward the mean will only occur between year 0 and year 1.
9. Supplementary analyses (not shown here) demonstrate that longitudinal fame trajectories continue to exhibit the broad pattern of transition from brief to long fame shown in Figure 6 when names are stratified by criteria other than the total number of newspapers that mention them. These criteria include the number of newspapers that mention a name in their peak year and a name's peak year, quarterly, or monthly reference volume.

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