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Insiders, Outsiders and the Struggle for Consecration in Cultural Fields:

A Core-Periphery Perspective

Gino Cattani
Department of Management & Organizations
Stern School of Business – NYU
40 West 4th Street
Tisch Hall Suite 7-14
New York, NY, 10012
Phone +1 212 998 0264
gcattani@stern.nyu.edu

Simone Ferriani
Dipartimento di Scienze Aziendali
Universita' di Bologna
Via Capo di Lucca, 34
40126 Bologna (ITALY)
Tel: +39051 209 8073
Fax: +39051 209 8074
rashomon@economia.unibo.it

Paul D. Allison
Sociology Department
University of Pennsylvania
3718 Locust Walk
Philadelphia, PA 19104
allison@soc.upenn.edu

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ABSTRACT

Building on recent research emphasizing how legitimacy depends on consensus among audiences about candidates' characteristics and activities, we examine the relationship between cultural producers' (candidates) position in the social structure and the consecration of their creative work by relevant audiences. We argue that the outcome of this process of evaluation in any cultural field, whether in art or science, is a function of (1) candidates' embeddedness within the field, and (2) the type of audience, i.e., peers vs. critics, evaluating candidates' work. Specifically, we hypothesize that peers are more likely to favor candidates who are highly embedded in the field while critics will not show such favoritism. We find support for these hypotheses in the context of the Hollywood motion picture industry. The theoretical implications of the results are discussed.

Key Words: Consecration; Peers and Critics; Cultural Producers; Core/Periphery; Film Industry.

Bourdieu's seminal work on cultural fields (1993) emphasizes the role of relevant audiences as agents of consecration with the authority to produce symbolic capital. The ability to impose judgments of symbolic legitimacy, or the power to consecrate, in cultural fields allows participants to reproduce their positions—thus influencing the choice of (and return to) different aesthetic strategies (DiMaggio 2011). Because these judgments produce prestige hierarchies and affect field evolution, cultural fields are in an incessant state of struggle between established and emerging actors who compete for symbolic distinction based on subjective rules of merit, and the vested interests and social objectives that they embody. While incumbents work to defend and reproduce their view and impose consensus, challengers try to “break the silence of the doxa and call into question the unproblematic, taken-for-granted world of the dominant groups” (Bourdieu 1993, p. 83). The structural outcomes of this struggle have been variously conceptualized as dichotomies that classify cultural producers into incumbents and dissidents, insiders and outsiders, orthodox and heretics, core and peripheral players.

Several studies (e.g., Anheier et al. 1995; Faulkner 1983; Faulkner and Anderson 1987; Giuffrè 1999) have found empirical support for an oppositional structure permeating cultural fields, in which a relatively small number of established players have the necessary material and political resources to enforce norms and standards for evaluating cultural productions that conform to their specific interests, while a much larger number of peripheral players try to advance alternative views and voice their relevance to the field. Thus, the propensity to produce work that departs from a field's canons and expectations is not randomly distributed but tends to map onto the field's social structure: core players are more likely to defend orthodoxy in cultural production because “their symbolic capital was founded on already-established types of cultural production, such as the performance of canonical works” (Kremp 2010, p. 1055). In contrast, peripheral players are more likely to produce work that departs from the field's canons and

expectations. Because cultural fields operate to reproduce the power and privilege of incumbent groups, peripheral players have only limited chances of proving their worth, especially if their products contrast sharply with prevailing expectations. What mechanisms can help peripheral players break into the prestige hierarchies of cultural fields? What role do social audiences play in shaping the struggle for legitimacy between core and peripheral players?

We address these questions by proposing a framework based on Bourdieu's intuition regarding the role of social audiences¹ in shaping the allocation of symbolic capital between core and peripheral members of a cultural field. Our strategy is to focus on two types of audiences that reward cultural producers – peers and critics. These audiences correspond to two distinct selection systems, each emphasizing different criteria to assign cultural legitimacy (Allen and Lincoln 2004; Kersten and Bielby 2012).

In the US feature-film industry, our empirical setting, cultural producers have become increasingly concerned with professional and critical recognition following the legitimization of film as an art form in the late 1950s and 1960s (Baumann 2001, 2007). After characterizing the particular discourse of value that regulates the practice of consecration within each of these audiences, we investigate how peers and critics differ in the extent to which their symbolic capital allocation – in the form of prizes and awards – is influenced by the socio-topographic location of those whom they evaluate. Our findings reveal that cultural producers who are core members of a field enjoy disproportionately higher esteem from peer audiences. Critics, on the other hand, do not favor core producers in their consecration decisions and may even give some

¹ We employ the term 'audience' rather than other (related) concepts such as gatekeepers, social groups or stakeholders because it offers a more accurate and sociologically richer foundation to our arguments. The notion of social audience subsumes the following key ideas – not always as clearly present in related concepts: resource asymmetry; congruence with minimal criteria; and evaluation of social objects as a social process. Indeed, audiences control the material or symbolic resources on which cultural producers depend for success and survival (Zuckerman 1999); cultural producers (candidates) seeking to access such resources are expected to present audience members with offers that meet their criteria; and the selective allocation of worth follows a process of evaluation based on a set of criteria against which the social object is evaluated (Lamont 2012).

preference to peripheral producers. These findings emphasize the importance of studying how different audience-level selection mechanisms influence the structure of symbolic capital allocation and ultimately affect field-level social structure and change.

The Hollywood feature-film industry provides an ideal context for testing the implications of our theoretical framework. Every year, several organizations of elite peers and critics bestow awards on those judged to have made exemplary cinematic contributions. These awards are important vehicles through which cultural producers may internalize collective social norms about what is sacred and what is profane, and who is an insider and who is an outsider (Rossman, Esparza and Bonacich 2010; Watson and Anand 2006). In this way, award ceremonies are crucial mechanisms for social stratification as they “construct prestige hierarchies that both enable and constrain actors’ abilities to form relationships with others in a field” (Anand and Watson 2004, p. 776). We exploit these industry features to study the relationship between social structure, audiences, and consecration in cultural fields.

Cultural Fields and the Struggle for Legitimacy

The impact of social structure on the propensity to engage in innovative rather than conforming behavior has deep sociological roots. As Simmel (1971) noted, marginal actors “with the least opportunity for full participation in the most valued activities of their own society [...] may be stimulated to make new responses which depart from the habitually required” (Coser 1962, p. 179). Several studies by sociologists of science and culture have emphasized that peripheral actors are in a unique position to champion dissenting ideas that challenge the natural order (e.g., Mulkey 1972; Edge 1977; Tuchman 1989; Mezias and Mezias 2000; Kirschbaum and Vasconcelos 2007; Cattani and Ferriani 2008). Being less tied to norms that regulate those who are in the core of the field, peripheral actors possess what Zuckerman and Merton (1973, pp.

518-519) call “focused naïveté” – i.e., “a useful ignorance of prevailing assumptions and theories that allows them to attack problems generally regarded as impossible or uninteresting by specialists.” For this reason, they may be more open to lines of inquiry that run counter to received wisdom. The challenge for peripheral players is that the same social position that enables them to depart from prevailing norms may also restrict their access to resources and social contacts that would facilitate the completion and legitimation of their work.

Bourdieu (1993, pp. 57-58) identified two mechanisms that enable peripheral players to establish their cultural authority. The first is the occurrence of exogenous changes, such as revolutions or other political crises, that open up space for alternative views. The second rests on the availability of a homologous reception space, namely an audience predisposed by its beliefs and tastes to consider the kinds of offers being proposed. Cultural sociologists and institutional theorists have extensively examined the role of exogenous shocks in subverting a field’s dominant logic (e.g., Collins 1987; Zucker 1988). However, the possibility of audience-level variations offering countervailing mechanisms to the social stratification process has been understudied.

The understanding of legitimacy as a relationship with an audience rather than a possession of the actor is central to the theory of cultural fields. We take seriously Bourdieu’s assertion that “all the homologies which guarantee a receptive audience and sympathetic critics for producers who have found their place in the structure work in the opposite way for those who have strayed from their natural site” (1993, pp. 95-96). The existence of a homologous audience is a critical precondition for peripheral cultural producers to climb the reputational ladder. Contributions that conflict with the dominant view “cannot be understood sociologically unless one takes account of the homology between the dominated position of the producers ... and the position in social space of those agents ... who can divert their accumulated cultural capital so as

to offer to the dominated the means of objectively constituting their view of the world” (Bourdieu 1985, pp. 737-738).

Peripheral field members can benefit greatly from the presence of a homologous audience, one whose views, beliefs and tastes are attuned to their own. Anand and Watson (2004) provided a powerful illustration in their study of the Grammy awards given by the National Academy of Recording Arts and Sciences. The Academy initially opposed the recognition of progressive genre musicians such as rock and roll and rap artists. But intergenerational changes in Academy demographics, particularly the entry of new members whose tastes and values were more attuned to those of progressive musicians, proved crucial in gaining legitimacy for peripheral actors. We explore and extend these ideas by examining a case in which the observed variation is not within – as in Anand’s and Watson’s account – but across different audiences. Specifically, we examine two audiences—peers and critics—that have quite different degrees of homology with respect to the producers that they evaluate.

THE SOCIAL STRUCTURE OF CONSECRATION IN HOLLYWOOD

Choice of Hollywood as Field

We believe that the Hollywood feature-film industry is an ideal setting for our analysis. This industry embodies key aspects of our theoretical framework: cultural producers are entangled in a “competitive struggle for advantage and advancement” (Faulkner 1983, p. 69). Like many cultural fields, Hollywood is dominated by an elite, with only a small fraction of cultural producers having successfully climbed the reputational ladder (Faulkner and Anderson 1987). There are also severe disparities in control over resources, together with a “very large pool of peripheral participants who vie to establish a foothold in the industry” (Zuckerman et al. 2003, p.

1036). The mechanisms by which marginal players acquire symbolic capital are therefore of particular interest.

Field players (e.g., producers, distributors, etc.) tend to invest in past successes and avoid recruiting professionals that do not have established reputations or work on projects that do not fit recognized categories (Zuckerman and Kim 2003). This pattern of investment yields a continually reproduced system of inequality whereby a small number of individuals and organizations are very productive, and often very conspicuous in terms of their connections and rewards, while a much larger group remains on the margins of the network (Faulkner 1983; Giuffrè 1999). Professionals advance their careers by accruing credits and connections that allow them to move from the margins of the network to the center. Projects (here movies) are the material means for making social announcements about one's ability and identity.

In network analytic terms, the social structure of the feature-film industry is dominated by a core-periphery split in which “the inner core of actors tends to be a small world of tightly knit individuals, whereas the periphery is more open” (Peterson and Anand 2004, p. 322), allowing individuals with skills and resources to gain an entry point into the system. This partition reflects a relentless pressure to become visible and “push one's image, voice and credentials deeper into the industry's culture” (Faulkner 1983, p. 22). Yet, as Faulkner's (1983) work on Hollywood composers clearly shows, the odds of a movie professional moving from the periphery to the core are extremely low. It is worth noting that admission into the core also comes with liabilities in the form of tighter restrictions on productions that challenge recognized standards and categories. At times such restrictions are so strong that some cultural producers may perceive them as onerous, perhaps even contrary to their self-understanding as artists (Anheier et al. 1995).

A second motivation for studying the feature-film industry is the opportunity to examine how different audiences' evaluation criteria shape a professional's chances of being culturally consecrated. Starting in the late 1950s and early 1960s, the transition from the studio system to director-centered production led to the legitimation of film as an art form in the United States. This was followed by the proliferation of film festivals and ceremonies intended to celebrate cinematic achievement through special prizes and awards (Bauman 2001). Such honors are bestowed both by those directly involved in the film industry (i.e., peer professionals) and by movie critics. The results of these evaluations are made public every year by conferring prizes that celebrate exemplary achievements, thereby establishing a level of recognition in the field unattainable through other means. These accolades and rituals constitute "the symbolic capital that may serve as an alternative to economic capital" (Baumann 2001, p. 406) and signal that film production has achieved a certain autonomy as a field.

Peers, Critics and the Allocation of Symbolic Rewards

Cultural legitimation involves the use of aesthetic judgments to assign value to cultural producers and their products. Bourdieu (1993, pp. 50-51) identified three different types of cultural legitimacy: public acclaim (popular legitimacy), professional recognition from peers (specific legitimacy), and critical evaluation (bourgeois legitimacy).² Different audiences typically employ different criteria. Here we focus on the selective judgments that express two distinct aesthetic logics embedded in the world of professional criticism and in the world of film practice.³ As Allen and Lincoln noted: "The existence of competing discourses of value may

² We would like to thank an anonymous review for bringing to our attention this important point.

³ We do not focus on popular acclaim for two reasons. First, the selection criteria governing the taste of ordinary consumers are subject to extreme and erratic fluctuations due to mechanisms of social influence (Salganick et al. 2006). A well-known implication of such mechanisms is the pervasive "nobody knows" effect, i.e., the impossibility of predicting which cultural product or producer will receive popular acclaim (De Vany and Walls 1996). Second, while in our empirical context peers and critics grant individual-level legitimacy by rewarding particular

explain why films that receive professional recognition from other cultural producers are not always the same films as those that receive critical recognition from critics” (2004, p. 877). Similarly, Kersten and Bielby (2012) suggest that critics’ evaluations vary systematically on several aesthetic dimensions across films ultimately consecrated by peers or critics.⁴

In the US feature-film industry, peers and critics are organized into distinct awarding organizations that reveal their preferences in annual ceremonies that play a critical role in constructing prestige hierarchies (O’Neil 2003; Gemser, Leenders and Wijnberg 2008). Like tournament rituals (Anand and Watson 2004), these ceremonies not only offer established professionals an opportunity to reinforce their authority but are also “the arena within which non-elites can express alternative and non-official attitudes and values” (Lukes 1975, p. 299). Using information on professional societies’ membership, we classified Hollywood’s main awarding organizations into peer- and critic-based. Peer-based awarding organizations include the Academy of Motion Picture Arts and Sciences and the various professional guilds (e.g., Directors Guild of America, Screen Actors Guild, etc.). Critic-based awarding organizations include the New York Film Critics Circle, the National Society of Film Critics, the Los Angeles Film Critics, and the Boston Society of Film Critics (Table 1). These organizations have been in existence for several years, are widely regarded as reliable and competent, and have granted annual accolades in most major categories of filmmaking expertise (Levy 2003; Simonton 2004).

<< **Insert Table 1 Here** >>

Peer Recognition

professionals for their exemplary achievements across a variety of cinematic specialisms, popular recognition is a form of legitimacy that usually operates at the team/project level: box office rentals capture the commercial acclaim of the movie and there are no corresponding indicators at the level of the individual professionals within the team.

⁴ Kerstend and Bielby (2012) find that, while such aesthetic elements are constitutive components of critics’ discourses of value and are therefore present in all reviews, their use depends on the type of recognition (peer, popular or critical) a particular movie receives.

Peer audiences are members of the same community as the producers they evaluate, though taking on different roles (Debackere et al. 1994; Wijnberg 1995). This observation holds important implications for understanding how they evaluate cultural producers. First, peer evaluators are typically elite representatives of the field's dominant canons. As such, they have the authority to determine the legitimate definition of a given type of work and, by extension, the authority to define those works which guarantee the configurations of the field's canon (Bourdieu 1993). Accordingly, they tend to define excellence as "what is most like me" (Lamont 2009) and to provide a disproportionate amount of material and symbolic resources to core members of the field who are more strongly associated with its dominant canons.

Second, evaluators and producers who are located in the core of the field's social structure are more likely to share similar cognitive and social networks, resulting in a potential bias toward work emanating from the core. Indeed, producers will be able to impress prominent peers if they share "with those whose judgment matters most a common repertoire of beliefs, assumptions, background knowledge..." (Gross 2000, p. 856). This has been documented in academic evaluation systems where evaluators are usually established and highly embedded scholars who "are frequently asked to adjudicate the work of individuals with whom they have only a few degrees of separation..." and "often favor their own type of research while being firmly committed to rewarding the strongest proposal" (Lamont 2009, p. 8). Third, elite peers are more prone to resist work that deviates from established normative expectations because they have a vested interest in guaranteeing "the continued reproduction of the legitimacy of those who produce or defend the canon" (Bourdieu 1993, p. 20). As Peterson (1979) noted, when the evaluation criteria "are tightly held by an academy of peers, there is an orientation to traditional canon of arts (or religion or science)" (p. 157).

These characteristics of peer audiences are well exemplified by the Academy of Motion Picture Arts and Sciences, both in the process by which it accepts new members and in the decisions it makes about nominations and awards. These decisions tend to reflect the aesthetic preferences of the elite group in each branch—namely those who are more attuned or homologous to the core players in Hollywood. Since its founding in 1927, the Academy has been an association of Hollywood’s creative elite. New members are invited to join “when their services to the motion picture industry have been prominent enough to make the Academy members feel they would like to have them as brother members” (Levy 2003, p. 46). Here, for example, are the official requirements for Directors Branch membership:

“Membership shall be by invitation of the Board of Governors. Invitations to active membership shall be limited to those persons employed by motion picture producing companies, or credited with screen achievements, or who have otherwise achieved distinction in their respective fields of endeavor within the industry and who, in the opinion of the Board, are qualified for membership” (<http://www.oscars.org/academy/members/requirements/producers.html>).

The easiest way to become a member, however, is to get an award nomination—all Oscar nominees are invited to become members. Beyond that, each branch has its own criteria. In most branches, it is necessary to have several film credits, several years of experience, and sponsorship by two established members. Branch membership determines who has the right to vote regarding awards and nominations. Specifically, members vote on nominees in their respective categories (e.g., directors for directors, actors for actors, writers for writers). However, all voting members are eligible to select the Best Picture nominees. Except for the Actors Branch, the relatively smaller size of the other branches means that relatively few voters determine a nominee. For instance, in the Directors Branch, which in 2002 consisted of 364 members (the number has not changed much over the years), a group of 20 or 30 members could nominate a director. Indeed, the Directors Branch is “not only small but cliquish as well” (Levy 2003, p. 49).

Life membership and the relatively high average age of voting members may also impact the Academy's decisions. The age difference between older members and those actively involved in filmmaking inevitably "make the Academy vote more conservative, lagging behind the industry's aesthetic and technical innovations" (Levy 2003, p. 48). Indeed, the Academy vote is often criticized for displaying a conservative bias. The Best Picture winners, for example, are often described as "soft, noble, middlebrow movies that reflect the dominant culture, steering clear of provocative issues or innovative experimental styles" (Levy 2003, p. 48).

The professional guilds are much larger than the Academy branches. For instance, in 2002 the Academy's Directors Branch consisted of 364 members, while the Directors Guild of America (DGA) had 12,400 members who, in addition to filmmakers, included TV directors, associate directors, stage managers, and unit production managers. Their larger membership base might suggest that guild decisions are less cliquish than the Academy's. Yet the guilds' award decisions do not support this suspicion. For example, according to O'Neil (2003, p. 797), the DGA award is considered "Hollywood's most influential prize after the Oscar—for two reasons: directors are the reigning kings and queens of pix, so it matters a lot what their peers think, and second, Oscar voters defer most often to the DGA's choices before inking their ballots". From 1947 to 2004 (which includes our study period) the Oscars have embraced 51 of the DGA's winners in the Best Director category, an agreement rate of 89 percent.

Decisions by the Screen Actors Guild (SAG) are also quite similar to those of the Academy. Since 1995 (when the SAG awards were first introduced) until 2004, 27 of the 44 actors/actresses nominated by the SAG were also nominated by the Academy. Similar patterns hold for the other professional guilds. Thus, despite having thousands of additional members, guilds and Academy voters "are obviously like-minded" (O'Neil 2003, p. 794).

Critic Recognition

Several considerations suggest that critics' evaluations of cultural producers do not mirror those of peers. Because of their specialized training and high levels of cultural capital, critics cultivate aesthetic dispositions that raise their legitimacy as arbiters of taste and agents of consecration (Janssen 1997; Van Rees 1987). They also have significantly more incentive than peers to discover new talents with the potential to rise to fame (Bourdieu 1984). Indeed, a critic is motivated to be "the first to come up with an assessment that other people [...] might somehow use as a peg for their own ... response" (Van Rees 1987, p. 286). In fact, it may be dangerous for critics not to embrace a new style, as they risk losing reputation if that style becomes popular. In the visual arts, for instance, critics played a crucial role in fostering the rise of the "radical" painters who became known as the Impressionists. Systematically rejected by the Salon de Paris (the bastion of elite peers within the Académie des Beaux-Arts) which favored established artists, the impressionists found an homologous reception space in the world of critics and painting experts, who sometimes openly proclaimed their disdain for the judgments of the Académie. These critics did not have a vested interest in perpetuating the status quo because they "derived their legitimacy and importance from being among the first to recognize the value of new entrants into the visual arts industry" (Wijnberg and Gemser 2000, p. 324).

A similar contrast between peers and critics seems to characterize the film industry. For the award of Best Director, the National Society of Films Critics agreed with the Oscars in only three instances during our study period, and only once with the DGA. The New York Film Critics agreed three times with the Oscars and two times with the DGA. The Los Angeles Film Critics agreed with the Oscars in five cases; the Boston Society of Film Critics two times with both Oscars and DGA.

Critics have what Simmel (1971) called the objectivity of the stranger—he who is not bound by stable social ties to other group members. Although both critics and cultural producers are members of the same field, they are not embedded in the same professional community. In principle, this should promote an unprejudiced perception, understanding, and assessment of candidates' work, allowing them to make evaluations with more objectivity. Lacking an incentive to prefer one particular style over another, they may be more willing to support and consecrate offers that depart from the field's dominant norms and standards—offers that typically (though not exclusively) emanate from the margins of the field (Collins 1987).

Consider the impact of critics on the career of iconic filmmaker Quentin Tarantino. As a former employee of a video rental store in Los Angeles and with no formal filmmaking education, Tarantino had practically no markers of credibility and was truly peripheral when he directed his 1992 debut feature *Reservoir Dogs*. First screened at the Sundance Film Festival, *Reservoir Dogs* became the festival's most talked-about movie, and Miramax decided to distribute it. Over the course of that year, Tarantino “turned up at festival after festival, receiving lavish praise and awards from intellectual critics for making the hottest indie of the year” (Levy 1999, p. 15). In just a few years, Tarantino rose from obscurity to fame, and the fact that “the film didn't do well didn't matter. It created enough of a stir to give Tarantino the clout to make his next film, *Pulp Fiction*, with a larger budget (\$8 million) and a high-caliber cast” (Levy 1999, p. 17). Notably, *Reservoir Dogs* received no recognition from the Academy, the guilds nor from any other purely peer-based audience. It might be tempting to regard Tarantino's case as unique; in fact, it is highly instructive of how peripheral players can succeed by eliciting support from one homologous audience within a cultural field.

The previous arguments suggest not only that symbolic rewards for cultural producers are socially structured, but also that the saliency of this structure may vary with the type of audience

bestowing those awards. One would expect peers to be more likely to consecrate core cultural producers as opposed to peripheral producers. We do not expect the same relationship for critics, however. They may have an incentive to consecrate the work of peripheral producers or at least to not discriminate between core and peripheral producers. By providing peripheral producers with space that is more receptive to their offers, critics may alter the stratification resulting from peers' choices. Thus, we make two major predictions regarding the award decisions by these audiences:

1. As organizations of peers bestow accolades, they are likely to favor members in the core of a cultural field over those in the periphery, holding other factors constant.
2. As organizations of critics bestow accolades, they are not likely to favor members in the core of a cultural field over those in the periphery, and may actually favor those in the periphery.

ANALYTIC STRATEGY

Data Set

Our data consist of the population of crew and cast members (hereafter “professionals”) who worked on at least one of the 2,297 movies distributed in the US by the eight major studios – the seven historical majors plus Dreamworks (founded in 1994) – and their various subsidiaries over the period 1992-2004. Because we are interested in films made and distributed by Hollywood, we did not include documentaries, foreign-made films, short films, and compilations. While focusing on the major studios might suggest a neglect of artistically oriented movies in favor of commercial ones, these companies have numerous divisions (often carried over from previous acquisitions) that specialize in different types of films (see Table 2).

<< Insert Table 2 Here >>

Some of these specialize in small-budget niche films (often including such adjectives such as “repertory,” “independent” or “classic” in their names) and have been widely acknowledged as focusing on more artistically oriented movies and less visible talents. Thus, although we do not have data on the entire population of films, we believe the risk of underrepresenting the periphery of the Hollywood field is low. We gathered information on the composition of the production team of each movie and on the consecration of its members’ work by recording awards and/or nominations (hereafter “accolades”) received. We focused on the following professionals: director, writer, leading and supporting actor/actress, editor, cinematographer, and production designer. Using the Internet Movie Database (IMDB) we identified over 12,000 professionals. We also crosschecked this information with the Alan Goble Film Index (Goble 2003) to ensure data quality. Although we included producers in the analysis of the Hollywood social network, we excluded them from the analysis of accolades because there is no specific award that is assigned to producers. The award for best movie goes to the *movie*, a collaborative venture, even though the award is handed to the producer.

Dependent Variable

We used a discrete-choice approach to model the audience-candidate evaluation process, in which peer- and critic-based organizations select candidates whose work is consecrated with an award or a nomination, from among the large set of candidates eligible in a given year. This approach seems particularly appropriate given that consecration, by its very nature, imposes discrete (rather than continuous) distinctions between candidates who deserve recognition and those who do not (Allen and Lincoln 2004). In our context, a decision consists of a choice by a particular organization, in a particular year, to award an accolade (award or nomination) to a particular professional for performance in a particular role. Each decision has a choice set that

includes all the professionals who were potentially eligible for the accolade. For each member of the choice set, the dependent variable is coded 1 if a person received an award or nomination, otherwise 0. Separate discrete-choice models were estimated for peer organizations and critic organizations.

Independent Variables

To distinguish between core and peripheral producers, we adopted a network analytic approach in line with Faulkner (1983), Faulkner and Anderson (1987) and Anheier et al. (1995). We first identified the social network of interactions between Hollywood professionals from the bipartite affiliation structure between professionals and movies. This means that professionals working on the same movie are presumed to have a tie to one another (see Appendix for details).

In an idealized core-periphery structure, the core is a group of nodes that are connected to all other nodes of both the core and the periphery. The periphery is a group of nodes that are not connected to each other but only to the nodes in the core. Although no real social network conforms to this ideal, an algorithm is used to maximize the density within the core and to minimize the density within the periphery. Borgatti and Everett (1999) proposed the following method for partitioning a set of nodes into a core and a periphery. Let α_{ij} be a (0, 1) variable indicating the presence of a tie between node i and node j . Define δ_{ij} to have a value of 1 if both i and j are in the core, 0 if both i and j are in the periphery, and “missing” otherwise. Then choose a partition to maximize the Pearson correlation between α and δ , where the correlation is computed over all non-missing pairs. This can be accomplished with a genetic algorithm.

Using the UCINET VI package (Borgatti, Everett, and Freeman 2002), we constructed the binary variable *Periphery* which takes the value 1 when individuals are in the periphery of

the Hollywood network and 0 for those in the core.⁵ This variable was based on network ties in a 3-year moving window, but the results did not vary much using different time windows.

The set of professionals in the core varies from year to year. Over the study period, approximately 346 different professionals (about 3% of the total) were in the core in at least one year. Professionals may stay in the core or the periphery for the entire period, or move from the periphery to the core (e.g., Billy Bob Thornton after *All the Pretty Horses* in 2000) and vice versa (e.g., Mira Sorvino after *Mimic* in 1997). The small size of the core reflects the unequal distribution of ties in the social structure of the movie industry. As Faulkner and Anderson (1987) observed: “The film community like most culture industry systems and like most high-performance systems is dominated by an active elite and manifests inequality in productivity, [and] cumulative resources in the form of ties.”

Control Variables

To rule out alternative explanations for our hypothesized relationships, we included several control variables in our models.

Role. As noted above, the analysis focuses on a restricted group of professional roles. Controlling for role is essential because the choice sets are specific to particular roles. Moreover, different organizations bestow awards for different roles, and the number of these has changed over time in some cases. While the Academy of Motion Picture Arts and Sciences tends to assign awards to all categories, the Los Angeles Film Critics Association assigns no awards for movie editing, and the various guilds only give awards to their members. Individuals

⁵ The output in UCINET also includes an overall measure of “fitness” that indicates how well the observed data approximates an ideal core/periphery structure. Although there is no standard statistical test to assess the fitness significance, a high fitness measure implies a good agreement with the model, while a lower fitness measure suggests that the model should be rejected. Running the discrete model yielded an average correlation criterion of 0.6, suggesting a satisfactory agreement with the model.

performing roles with more award categories have more chances of receiving accolades. We adjusted for these possibilities by including a fixed effect for the role each professional performed in a given movie. This was accomplished either by stratifying on role in conditional logistic regression or by including role as a set of dummy variables.

Degree of Control. It is quite possible that individuals performing multiple roles also enjoy more freedom in the pursuit of their goals and are in a better position to express their skills and talents. While in most cases there was only one specialist per role, a professional sometimes performed multiple roles in a single movie (e.g., Clint Eastwood was director, actor and producer for *Unforgiven* in 1992) or the same role was collectively performed by multiple individuals (e.g., Joel and Ethan Cohen co-directed *Fargo* in 1996). We therefore created the variable *Degree of Control* to capture the extent to which professionals enjoy enough latitude to express their creativity by measuring the average number of different roles each professional performed in the same movie in a given year. This variable is similar to what Baker and Faulkner (1991) call “role as resource.”

Commercial Success. Participation in commercially successful movies both reveals and shapes the perception of a professional’s place in the industry hierarchy. Indeed, Hollywood professionals’ bankability translates into *stardom*. Accordingly, we measured professionals’ commercial success by how well their previous movies fared at the box office. Specifically, we counted the number of “top 10” box office movies in which each professional worked during the three years prior to the focal year (results did not change much with different time windows). We also ran the analyses using the “top 20” and “top 30” box office movies, but results were not substantially affected.

Artistic Reputation. For most observers, a high number of accolades in an individual’s career would seem to indicate exceptional talent and reputation. Previous research suggests that

the most successful movie professionals enjoy preferential access to resources and information (Faulkner and Anderson 1987) and are offered more jobs (Zuckerman et al. 2003), further increasing their chances of receiving an accolade. Accolade recipients also enjoy greater media attention than their lower-status counterparts. Accordingly, we created the variable *Artistic Reputation*, i.e., the number of accolades each professional gained during the three years prior to the focal year (again, the results did not change much with a different time window).

Team Reputation. Movies are made through the complementary inputs of many professionals, each of whose efforts facilitates the work of other team members. In practice, this suggests that professionals should perform better when surrounded by talented collaborators (Rossman et al. 2010). Besides skills, status may also spill over from accomplished team members (Benjamin and Podolny 1999). Thus, a professional can receive greater recognition by collaborating with highly reputed colleagues. We measured the reputation of the team as the average number of accolades team members other than the focal individual received in the three years prior to the focal year. If a professional made more than one movie in a given year, we used the average number of prior accolades for all the team members s/he worked with in that year.

Movie Sequel. Movie makers may strive for artistic originality or they may focus on more formulaic content. Although sequels are sometimes critically praised (e.g., the sequels to the *Godfather* and the *Lord of the Rings*), they tend to capitalize on a successful formula—which might reduce the likelihood of a professional receiving an accolade. Following previous studies (e.g., Ravid 1999), we created a dummy variable *Sequel* that has the value 1 if a movie is a sequel and 0 otherwise.

Movie Rating. Another potential factor affecting the receipt of accolades is the rating assigned by the Motion Picture Association of America (MPAA). Ratings signal the degree of

sexually graphic sequences, violence and strong language in a movie. Prior research suggests that features produced for mature audiences perform less well at the box office (Ravid 1999). Movies that are rated G, PG and PG-13 have greater audience potential, and indeed movie theaters' landlords sometimes contractually prohibit them from showing NC-17 films. As a result studios quite often exert some pressure on directors (and producers alike) to ensure that films receive a rating aligned with their market aspirations. This practice can obviously constrain creativity (e.g., in the treatment of controversial material or the choice of scenes to edit out of a final print). We accounted for this by including a categorical variable with five categories: G, PG, PG-13, R, and no available rating.

Movie Genre. The likelihood of an accolade being bestowed could also depend on movie genre, on the premise that a movie's artistic content might vary across different genres (e.g., action, drama, comedy, thriller, animation). For instance, the thriller genre was seen as disreputable until the 1960s when American critics began to take Alfred Hitchcock seriously as an artist (Kapsis 1992). Similarly, a professional working on an action movie is less likely to gain accolades because action movies typically reflect more formulaic conventions. We created a categorical variable (with 18 categories) to control for each movie's genre using data from the American Film Institute (AFI).

Number of Movies. The chance of receiving an award or nomination is also likely to depend on the actual number of movies each professional makes in a given year. Since most professionals tend to work on a single movie per year, we created a dummy variable that is equal to 1 when a professional was involved in at least two movies during the focal year and 0 otherwise.

Awarding Organizations. We grouped the awarding organizations selected for this analysis into two distinct audiences, *peers* and *critics*, on the premise that each audience type

tends to apply similar norms and standards when they evaluate and reward individuals' creative work. To account for the impact of stable, unobserved differences between organizations *within* the same audience type, we either stratified by awarding organization or included a set of dummy variables in the models.

Year. Since we had no *a priori* expectations about possible trends over the study period, we controlled for unobserved factors (e.g., macro-economic trends, changes in taste or fashion, and other factors that might affect the movie industry) by stratifying by year or by treating year as a categorical variable.

MODEL

For a given role in a given year, we modeled the impact of a professional's characteristics on the probability that an organization bestowed an accolade on that professional rather than any other who was eligible in that year. This can be framed as a series of discrete choices with a professional selected in each category (role) each year from a set of possible candidates. Let y_{ij} be equal to 1 if organization i (with $i = 1, \dots, n$) chooses professional j (with $j = 1, \dots, J_i$), otherwise 0; and let x_{ij} be a vector of explanatory variables describing professional j for organization i . The number of possible choices is J_i to indicate that different organizations may have different sets of candidates to choose from. The conditional logit model introduced by McFadden (1973) has the following general form:

$$\Pr(y_{ij} = 1) = \frac{e^{\beta x_{ij}}}{e^{\beta x_{i1}} + e^{\beta x_{i2}} + \dots + e^{\beta x_{iJ_i}}}$$

where β is a vector of coefficients. This equation implies that the odds that organization i will choose professional j over professional k is given by $\exp\{\beta(x_{ij} - x_{ik})\}$. That is, it is a function of

the difference in the vectors of explanatory variables describing the two professionals.⁶ In the analysis we split the sample into two subsamples, one of peers' and the other of critics' organizations (Table 2). We then stratified by awarding organization, professional's role and year. We estimated the conditional logit model by maximum likelihood using PROC LOGISTIC in SAS (release 9.3).

ANALYSIS AND RESULTS

We began by estimating separate discrete choice models for peers and critics in which the *only* predictor variable was *Periphery*, a dummy variable for whether or not a professional was in the core of the Hollywood network. As previously noted, these models simultaneously stratified by year, role, and awarding organization, so that each stratum corresponded to a choice set for an awarding organization in a particular year. Among peer organizations, the coefficient for *Periphery* was -1.233 ($p < .0001$), corresponding to an odds ratio of .29. In other words, a professional in the periphery had a 71 percent lower odds of being chosen for an accolade than a professional in the core. For critic organizations the *Periphery* coefficient was -.508 ($p = .03$) with an odds ratio of .60. These results suggest that both peers and critics had a preference for members of the core, although the effect size and level of significance is much stronger for peers.

Next we introduce our control variables into the model, with results shown in Table 3. Model 1 displays the results for peer organizations. Although we do not report coefficient estimates for *Movie Genre* and *Movie Rating*, the two sets of dummy variables both have a statistically significant overall impact. The coefficient for *Movie Sequel* is significant and in the

⁶ Estimation of the conditional logit model depends on the 'independence of irrelevant alternatives' (IIA) assumption (Allison 2012). This means that the odds of choosing option j rather than option k are not affected by the presence or absence of other options. In our context, it is reasonable to assume IIA because "nominees are unlikely to be considered close substitutes for one another" (Pardoe and Simonton 2007, p. 381) and because of the large number of professionals that are included in each of the choice sets.

expected direction: professionals working in sequels were less likely to receive an accolade. Professionals whose team members received accolades in previous years (*Team Reputation*) were more likely to receive an accolade, a result consistent with findings from Rossman et al. (2010). The quality of each professional's human capital (*Artistic Reputation*) is significant and in the postulated direction. Those professionals who previously worked in commercially successful movies (*Commercial Success*) were more likely to receive an accolade, while those who worked in more than one movie (*Number of Movies*) were less likely to receive an accolade. The only variable that was not statistically significant was *Degree of Control*, measured as the number of roles the professional performed.

When all these variables are controlled, *Periphery* has a coefficient of $-.927$, which is somewhat smaller in magnitude than the bivariate coefficient reported above but still highly significant ($p < 0.0001$). The corresponding odds ratio of $.40$ indicates that peripheral professionals had an odds of receiving an accolade that was 60 percent lower than the odds for core professionals.

Results in Model 2 for critics show many similarities with the peer results. Again, the sets of dummies for genre and movie rating are highly significant. Like peers, critics tend to prefer those with a strong team reputation and a strong personal reputation, although the coefficients are somewhat smaller for critics. They also tend to dislike sequels, but for critics the effect is much larger. Unlike peers, critics are not swayed by whether a professional previously worked in commercially successful movies. Another exception is *Number of Movies*, which has a positive coefficient for critics and a negative coefficient for peers. The most important difference – and the one that confirms our second hypothesis – is that the coefficient for *Periphery* is positive and far from statistically significant. Moreover, the difference between the *Periphery* coefficient for critics and the coefficient for peers is highly significant ($p < .001$). Thus, in contrast to peers, we

find no evidence that critics' decisions were influenced by whether a professional was in the core or the periphery.

<< **Insert Table 3 Here** >>

Unobserved Heterogeneity. Although the models in Table 3 control for several characteristics of both the professionals and the films in which they appeared, it is possible that unobserved heterogeneity could have biased either the coefficients or their standard errors. For many reasons, some professionals may simply be more attractive to both peers and critics, and the same is likely to be true for films. Due to computational limitations, we were unable to introduce unobserved heterogeneity directly into the discrete choice models. However, we explored the potential consequences of unobserved heterogeneity by switching to a closely related specification. Instead of stratifying by year, organization, and role, we simply entered these three variables into the logistic regression models as sets of dummy variables. That allowed us to use standard methods for introducing random effects into logistic regression (Allison 2012, Ch. 8). We then estimated one model with a random effect for individual professionals and another model with a random effect for films. We used PROC GLIMMIX in SAS to estimate the models by maximum likelihood. Because the two effects are not nested, it was not computationally feasible to enter both individual and film random effects in the same model. Formally the model is specified as

$$\log\left(\frac{p_{ij}}{1-p_{ij}}\right) = \beta x_{ij} + \varepsilon_{ij}$$

where p_{ij} is the probability that professional i receives an accolade for film j , x_{ij} is a vector of predictor variables describing professional i and film j , and β is a vector of coefficients. The random effect ε_{ij} is assumed to be normally distributed with a mean of 0 and a variance σ^2 , and is

statistically independent of x_{ij} . For the model with a random effect for individuals, the j subscript is deleted so that ε varies only across individuals. For the model with a random effect for films, the i subscript on ε is deleted.

Instead of estimating the models separately for peers and critics, we estimated combined models for both audiences. This was essential to allow the unobserved heterogeneity to be common to both critics and peers. To distinguish the two groups, the combined data set included a dummy variable *Critic* with a value of 1 for critics and 0 for peers. The models also included an interaction between *Critic* and *Periphery* to test whether the effect of *Periphery* varied between the two audiences. Also included were interactions between *Critic* and three other variables – *Number of Movies*, *Sequel*, and *Commercial Success* – to accommodate apparent differences in the effects of these variables in Table 3.

To ensure consistency with the discrete choice models of Table 3, Model 3 in Table 4 shows the results from a logistic model *without* any random effects. Careful inspection of the main effects and interactions reveals that these results are all quite similar to those in Table 3. Most importantly, the effect of *Periphery* for peers (-.910) in Model 3 (the main effect of *Periphery*) is quite close to the coefficient in Model 1 (-.927). Both are highly significant. The effect of *Periphery* for critics in Model 3 is obtained by adding the main effect to the *Critic* × *Peer* interaction: $-.910 + 1.094 = .184$ which is not statistically significant. This compares with .089 in Model 2, also not statistically significant.

Model 4 of Table 4 introduces a random effect for individual professionals. There is strong evidence for unobserved heterogeneity at the level of professionals: the estimated random effects variance is 7.822 with a standard error of .601. Results for two of the control variables are markedly different in this model, compared to the Models in Table 3. *Commercial Success* had significant positive effects in Models 1 and 2 but is not significant in Model 4. *Artistic*

Reputation had highly significant *positive* effects in Models 1 and 2 but a highly significant *negative* effect in Model 3. Despite these differences, our results for the key variable *Periphery* are essentially similar to those for the discrete choice models. *Periphery* has a highly significant negative effect for peers (-1.423) but no detectable effect for critics. The coefficient for critics is obtained by adding the main effect and the interaction: $-1.423 + 1.162 = -.261$, which is not significantly different from zero. The odds ratio for peers is .24, translating to a 76 percent reduction in the odds of an accolade for members of the periphery compared with members of the core. The interaction between *Critic* and *Periphery* is highly significant, implying that the effects of *Periphery* for critics and peers are significantly different.

Model 5 introduces a random effect for films. As in Model 4, there is strong evidence for unobserved heterogeneity, this time at the film level. In this model, results for the control variables are fairly consistent with those in the discrete choice models. But the *Periphery* results are somewhat different. Here the magnitude of the *Periphery* effect for peers is much smaller (-.443) although still highly significant. For critics, the *Periphery* effect is $-.443 + 1.151 = .708$, a highly significant *positive* effect corresponding to an odds ratio of 2.03. This means that, holding other factors constant, the odds that a critic organization will award an accolade to a periphery member are double the odds for a core member. This is our first evidence that critics may actually favor members of the periphery rather than simply being indifferent to core membership. Again, the highly significant interaction term tells us that the *Periphery* coefficients for peers and critics are significantly different.

<< Insert Table 4 Here >>

We also estimated fixed effects models analogous to the two random effects models. These models have the attraction of actually controlling for all unchanging characteristics of professionals or films. Results essentially corroborated those in Models 4 and 5. However, we

are not reporting the details because large fractions of the professionals or films had to be excluded due to the absence of variation on the dependent variable.

Scope Conditions. We further probed the previous results by estimating additional models in order to establish the conditions under which the identified patterns are more or less likely to occur. Three scope conditions seem especially important. One possibility is that peers' preference for core cultural producers is restricted to the realm of elite peers who may have stronger stake in conformity and reciprocity. Our analysis has so far pooled all peers' awards irrespective of the actual standing of their respective membership, but one could argue that not all awards are decided by elite peers. Notably, while the Academy awards express the taste and preference of prominent representatives of the various cinematic professions, the guilds encompass a much broader membership with some individuals only marginally attached to any given profession. To explore such potential award-specific effect we estimated separate discrete-choice models for Academy awards and guild awards. The coefficients of the *Periphery* variable are negative (-0.927 in the model for the Academy and -0.913 in the model for the guilds) and statically significant ($p < 0.01$), suggesting that peers' preference for core members holds irrespective of the awarding body. We also tested whether the coefficient of the *Periphery* variable in the Academy model is statistically different from that in the Guilds model but found no significant difference. Thus, our results suggest that elite and non-elite peer choices follow a very similar pattern.

Another possible objection is that there may be substantial variation among critics in their openness to peripheral professionals, with prestigious critics paying significantly greater attention to established cultural producers (Janssen 1997). Because of the lack of compelling empirical grounds for accepting or rejecting value judgments, a critic may risk her reputation by

expressing a judgment that differs from those of her colleagues (Van Rees 1987). A critic's reputation as expert is "inseparably related to the extent to which, over a period of time, his judgments have met with his colleagues' approval" (Van Rees 1989, p. 498). Because they have more to lose, established critics may be less inclined to support deviant offers advanced by peripheral players. For instance, in the field of literary criticism by Janssen (1997) indicates that more occasional and therefore less established reviewers are those that tend to make more deviant choices.

To address this issue, we isolated the award choices of two organizations that stand in sharp contrast to each other with respect to their prestige and influence: The National Society Film Critics (NSFC) and The Boston Society of Film Critics (BSFC). The NSFC was founded in 1966 as a high-brow association to counter the other middle-brow film circles and it consists of 57 of the nation's most prestigious critics. Every year these critics confer the NSFC Awards in 10 categories. Established in the early 1980s, the BSFC is one of the youngest professional associations of film critics, and its membership consists exclusively of Boston-based journalists, primarily free-lancers with multiple affiliations and much less visibility than their NSFC counterparts. Every year the BSFC confers awards in 16 categories. To the extent that established critics act more deferentially, we expect critics' tendency to favor peripheral producers to be stronger within the NSFC than the BSFC. Accordingly, we estimated separate discrete choice models for NSFC and BSFC. The coefficient of the *Periphery* variable is positive (1.190) and non-significant in the model for the NSFC, but positive (1.473) and statistically significant ($p < 0.5$) in the model for the BSFC. The difference between the two coefficients is statistically significant. While consistent with our theory, these results add nuance to our second prediction suggesting that critics' homology to peripheral offers may depend on critics' prestige.

In the preceding analyses, our dependent variable was coded 1 if a professional received one award or nomination, otherwise 0. But the same professional could receive more than one award or nomination for her performance in a movie in a given year, especially if she performed multiple roles in that movie. Accordingly, Models 6 and 7 in Table 5 report results for logistic regressions in which the dependent variable is coded 1 if a professional received 2 or more awards or nominations from peers (Model 6) or critics (Model 7).⁷ The goal is to capture the degree of consecration accruing to any professional. As before, we find that organizations of peers are less likely to bestow 2 or more accolades to peripheral members, while organizations of critics do not seem to favor core over peripheral members.

<< **Insert Table 5 Here** >>

DISCUSSION AND CONCLUSIONS

A rich and vibrant tradition building on Bourdieu's pioneering insights treats cultural producers as engaged in an ongoing struggle to secure notoriety, prestige and esteem from colleagues. In this struggle to define what counts as culturally legitimate, the social audiences that control access to symbolic and material resources play a crucial role. Cultural consecration can be viewed as the most definitive form of cultural legitimation. By conferring honors, awards and prizes, cultural consecration separates individuals and their achievements that are worthy of admiration and respect from those that are not. Consecration is important in virtually every field of cultural production. Although the process of consecration may be governed in part by objective criteria associated with merit, achievement and performance, the relationship between observable differences and the attainment of symbolic capital is not straightforward.

⁷ We estimated a logit model because the professional receiving 2 or more awards or nominations could get them from more than one awarding organization—and this has no longer the structure of a discrete choice model.

Following Bourdieu, we sought to understand the consecration of cultural producers and their work as a joint result of socio-structural conditions at the individual level and judgments made by audiences about cultural producers and their offers. We framed cultural producers' claims for recognition as an on-going tension between the core and the periphery of the social field: on the one hand, core actors have an interest in continuity, identity and reproduction; on the other, peripheral actors are more prone to depart from established norms and standards. Audiences are central to this oppositional struggle because they define, elaborate and, most importantly, bestow differential value on some producers and their claims while devaluing others.

After characterizing the discourse of value that permeates the social practice of consecration within two of the principal audiences in the film industry—peers and critics—we examined how these audiences differ in the extent to which their consecration choices are affected by the socio-topographic location of the producers they evaluate. Consistent with our hypotheses, we found that professionals in the periphery have lower odds of receiving an accolade from peers than professionals in the core. But core professionals do not have higher odds of receiving an accolade from critics than those in the periphery. When we allowed for unobserved heterogeneity at film level, we found even stronger support for an asymmetry in audiences' consecration choices: not only do critics fail to privilege core incumbents but they actually favor peripheral producers in their awards of accolades. These findings yield several implications for future research that we now elaborate.

Contributions to Cultural Sociology

Conditional on prior achievements and status, the location of cultural producers in the social structure of a field may affect the consecration of their work and thus shape their reputation for

talent and creativity. This result complements the vast research that has treated individual merit as the primary factor in the production of work worthy of esteem (Sternberg 1985; Gardner 1993). In contrast to this prevailing approach, relatively little attention has been devoted to the ways in which consecration is shaped by processes of social validation that are enforced by external evaluators. Our findings are consistent with recent evidence (Allen and Parson 2006; Rossman et al. 2010) that consecration does not occur in a social void but is instead embedded in patterns of relationships and shaped by audiences that grant or deny distinction to competing candidates. Crucially, attaining such consecration is likely to hinge on whether peripheral players can appeal to a homologous social audience whose members share the same or similar dispositions and whose views, beliefs and tastes are attuned to their own. Lacking the authority of core players – as well as their privileged access to resources, relationships and other external markers of credibility – peripheral players face significant obstacles as they strive to establish legitimacy and attain consecration from established institutions. In any field of cultural production, the existence of a homologous audience represents a critical enabling condition for peripheral players to marshal credibility and increase their likelihood of success.

Contribution to Sociology of Stratification

In one of the most elaborate conceptualizations about the determinants of cultural legitimacy, Bourdieu (1984) situated taste at the center of a comprehensive theory of the relationship between social inequality and cultural practice, revealing the hidden social forces threaded through aesthetic judgment (see also, Shrum 1991). From the choice of books to the consumption of rock music, symbolic forms operate within a system of exchanges and domination central to the reproduction of the social structure. By focusing on the socio-structural conditions underlying the consecration process, our study contributes to the literature on the determinants of

stratification (Merton 1968) which has focused mainly on actors (e.g., individuals, organizations) vying for recognition rather than on the audiences responsible for conferring it (Zuckerman 1999). Research on the social structure of markets, for instance, has predominantly focused on attributes of market actors and the effects of their social position on the opportunities available to them (Podolny 1994; Benjamin and Podolny 1999). By emphasizing “homology” as a critical meso-level mechanism in the stratification of recognition, our study opens the door for a research agenda that exposes how audience evaluations shape the allocation of rewards among actors occupying different positions in a field’s social structure (Merton 1968).

Contributions to Sociology of Evaluation

In any cultural field, whether in art or science, the assessment of a given offer reflects subjective evaluation by the field’s relevant audiences. If audiences are diverse, highly divergent evaluation criteria may co-exist. This variation allows for more cosmopolitan and liberal cognitive styles, thus raising the chance that work that departs from accepted norms will find a more receptive audience. Indeed, work that fails to garner attention and approval from one audience might still win the “intellectual attention space” (Collins 1998) of another homologous audience, whose motivations are different and whose evaluation criteria may be more attuned to the dispositions of particular subsets of cultural producers.

Building on Bourdieu’s intuition on the role of homology variations across audiences in shaping the allocation of symbolic capital between core and periphery, we examined a case in which cultural producers face audiences with different degrees of homology vis-à-vis the producers they evaluate. Specifically, we considered the selective judgments of individual worthiness that are the expression of distinct aesthetic logics embedded in peer- and critic-based

audiences. Focusing on these audiences allowed us to consider more carefully the social mechanisms that underlie the allocation of symbolic capital to core and peripheral producers.

Previous research has delved into the question of how cultural products become consecrated and integrated into the canon by primarily using case studies (for a recent comprehensive review, see Lamont 2012). While case studies may provide deeper insight into the underlying mechanisms of the phenomenon of interest, they cannot unveil more general patterns that might extend to other cases – whether within the same or across different contexts. Following prior research (e.g., Allen and Lincoln 2004), we adopted a large-sample research design to go beyond the “accumulation of finite case studies to capture general subprocesses at work” (Lamont 2012, p. 206)—thus identifying more precise social-structural conditions that might affect the likelihood of consecration.

Several questions merit further attention. First, the assignment of awards in the film industry is single-blind, not double-blind; as our results show, professionals’ reputation and cumulative recognition affect how favorably their work is received (Clemens et al. 1995). While our models controlled for a variety of factors associated with producers’ reputation and status, exploring the extent to which the social structural ordering of consecration applies beyond single-blinded contexts would be a significant addition. Also, this paper focuses on contemporaneous consecration, i.e., the recognition awarded to cultural producers within a short time after they produced their work. Contemporaneous consecration does not typically impart the same level of cultural legitimacy as retrospective consecration (Allen and Lincoln 2004) which attests that producers and products survived the test of time (Becker 1982; Bourdieu 1993). Yet contemporaneous consecration certainly raises the reputation of cultural producers, thereby increasing their access to the resources they need to continue their work (e.g., Anand and Watson 2004; Lincoln 2007). What is the relationship between contemporaneous and retrospective

consecration of cultural producers? Do the odds of being retrospectively consecrated differ if contemporaneous consecration originates from critics as opposed to peers? These are but some of the many questions that future research could explore in greater depth.

REFERENCES

- Allen, Michael P., and Anne E. Lincoln. 2004. "Critical Discourse and the Cultural Consecration of American Films." *Social Forces* 82:871-894.
- Allen, Michael P., and Nicholas L. Parsons. 2006. "The Institutionalization of Fame: Achievement, Recognition and Cultural Consecration in Baseball." *American Sociological Review* 71:808-825.
- Allison, Paul D. 2012. *Logistic Regression Using SAS: Theory and Application*. Second Edition. Cary, NC: SAS Institute.
- Anand, N. and Mary R. Watson. 2004. "Tournament Rituals in the Evolution of Fields: The Case of the Grammy Awards." *Academy of Management Journal* 47(1):59-80.
- Anheier, K. Helmut, Jürgen Gerhards, and Frank P. Romo. 1995. "Forms of Social Capital and Social Structure in Cultural Fields: Examining Bourdieu's Social Topography." *American Journal of Sociology* 100(4):859-903.
- Baker, Wayne E., and Robert R. Faulkner. 1991. "Role as Resource in the Hollywood Film Industry." *American Journal of Sociology* 97:279-309.
- Baumann, Shyon. 2001. "Intellectualization and Art World Development: Film in the United States." *American Sociological Review* 66:404-426.
- . 2007. *Hollywood Highbrow*. Princeton, NJ: Princeton University Press.
- Becker, Howard. S. 1982. *Art Worlds*. Berkeley, CA: University of California Press.
- Benjamin, Beth A., and Joel M. Podolny. 1999. "Status, Quality, and Social Order in the California Wine Industry." *Administrative Science Quarterly* 44(3):563-589.
- Borgatti, Stephen P., and Martin G. Everett. 1999. "Models of Core/Periphery Structures." *Social Networks* 21:375-395.
- Borgatti, Stephen P., Martin G. Everett, and Lin C. Freeman. 2002. *Ucinet 6 for Windows*. Harvard: Analytic Technologies.

- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgment of Taste*. Cambridge, MA: Harvard University Press.
- . 1985. "The Market of Symbolic Goods." *Poetics* 14:13-44.
- . 1993. *The Field of Cultural Production*. Columbia University Press, New York.
- Cattani, Gino, and Simone Ferriani. 2008. "A Core/Periphery Perspective on Individual Creative Performance: Social Networks and Cinematic Achievements in the Hollywood Film Industry." *Organization Science* 19(6):824-844.
- Clemens, Elizabeth, Woody W. Powell, Kris McIlwaine, and Dina Okamoto. 1995. "Careers in Print: Books, Journals, and Scholarly Reputations." *American Journal of Sociology* 101(2):433-494.
- Collins, Randall. 1987. "A Micro-macro Theory of Intellectual Creativity: The Case of German Idealistic Philosophy." *Sociological Theory* 5(1):47-69.
- . 1998. *The Sociology of Philosophies: A Global Theory of Intellectual Change*. Cambridge: Harvard University Press.
- Coser, Lewis. 1962. "Social Functions of Deviant Behavior and Normative Flexibility." *American Journal of Sociology* 68(2):172-181.
- Davis, Allison, Burleigh B. Gardner, and Mary R. Gardner. 1941. *Deep South*. Chicago: The University of Chicago Press.
- Debackere, Koenraad, Bart Clarysse, Nachoem M. Wijnberg, and Micahel A. Rappa. 1994. "Science and Industry: A Story of Networks and Paradigms." *Technology Analysis and Strategic Management* 6(1):21-37.
- De Vany, Arthur S., and David Walls. 1996. "Bose-Einstein Dynamics and Adaptive Contracting in the Motion Picture Industry." *Economic Journal* 439(106):1493-1514.

- DiMaggio, Paul M. 2011. "Cultural Networks" Pp. 286-300 in *The Sage Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington. London: Sage Publications.
- Edge, David O. 1977. "The Sociology of Innovation in Modern Astronomy." *Quarterly Journal of the Royal Astronomical Society* 18:326-339.
- Faulkner, Robert R. 1983. *Music on Demand: Composers and Careers in the Hollywood Film Industry*. Transaction Books, New Brunswick, NJ.
- Faulkner, R. Robert, and Andy B. Anderson. 1987. "Short-Term Projects and Emergent Careers: Evidence from Hollywood." *American Journal of Sociology* 92:879-909.
- Gardner, Howard E. 1993. *Frames of Minds: The Theory of Multiple Intelligences*. New York: Basic Books.
- Galaskiewicz, Joseph, and Peter V. Marsden. 1978. "Interorganizational Resource Networks: Formal Patterns of Overlap." *Social Science Research* 7:98-107
- Gemser, Gerda, Mark. A. A. M. Leenders, and Nachoem M. Wijnberg. 2008. "Why Some Awards Are More Effective Signals of Quality Than Others: A Study of Movie Awards." *Journal of Management* 34(1):25-54.
- Giuffrè, Katherine. 1999. "Sandpiles of Opportunity: Success in the Art World." *Social Forces* 77(3):815-32.
- Goble, Alan. 2003. *The Complete Index to World Film*. Valan Publishing.
- Gross, Neil. 2000. "A Review of Randall Collins, the Sociology of Philosophies: A Global Theory of Intellectual Change. Cambridge: The Belknap Press of Harvard University Press, 1998." *Theory and Society* 29(6):854-859.
- Hanneman, Robert A., and Mark Riddle. 2005. *Introduction to Social Network Methods*. Riverside, CA: University of California, Riverside (published in digital form at <http://faculty.ucr.edu/~hanneman/>).

- Kapsis, Robert E. 1992. *Hitchcock*. The University of Chicago Press: Chicago, IL.
- Kersten, Annemarie, and Denise D. Bielby. 2012. "Film Discourse on the Praised and Acclaimed: Reviewing Criteria in the United States and the United Kingdom." *Popular Communication* 10(3):183-200
- Kremp, Pierre-Antoine. 2010. "Innovation and Selection: Symphony Orchestras and the Construction of the Musical Canon in the United States (1879-1959)." *Social Forces* 88(3):1051-1082.
- Janssen, Susanne. 1997. "Reviewing as Social Practice: The Effect of Sideline Activities on the Status of Writers." *Poetics* 24:275-297.
- Kirschbaum, Charles and Flávio Carvalho de Vasconcelos. 2006. "Jazz: Structural Changes and Identity Creation in Cultural Movements." Pp. 230-256 in *Only Connect: Neat Words, Networks and Identities*, edited by Martin Kornberger and Siegfried Gudergan. Liber, Copenhagen Business School: Malmo, Sweden.
- Lamont, Michèle. 2009. *How Professors Think*. Harvard University Press: Cambridge MA.
- , 2012. "Toward a Comparative Sociology of Valuation and Evaluation." *Annual Review of Sociology*, 38:201-221.
- Laudan, Rachel and Larry Laudan. 1989."Dominance and the Disunity-of-Method: Solving the Problems of Innovation and Consensus," *Philosophy of Science* 56:221-37.
- Levy, Emanuel. 1999. *Cinema of Outsiders*. New York University Press, New York, USA.
- , 2003. *All about Oscars*. The Continuum International Publishing Group, New York, USA.
- Lincoln, Anne E. 2007. "Cultural Honours and Career Events: Re-conceptualizing Prizes in the Field of Cultural Production." *Cultural Trends* 16:3-15.
- Lukes, Steven. 1975. "Political Ritual and Social Integration." *Sociology* 9(2):289-308.

- McFadden, David. 1973. "Conditional Logit Analysis of Qualitative Choice Behavior." Pp. 105-142 in *Frontiers of Econometrics*, edited by Paul Zarembka. Academic Press: New York.
- Merton, Robert. K. 1968. "The Matthew Effect in Science." *Science* 159(3810):56-63.
- Mezias, John M. and Mezias Stephen. 2000. "Resource Partitioning and the Founding of Specialist firms: The American Feature Film Industry, 1912-1929." *Organization Science* 11:306-322.
- Mulkay, Michael J. 1972. *The Social Process of Innovation*. London: Macmillan.
- Newman, Mark E. J. 2001. "Who is the Best Connected Scientist? A Study of Scientific Co-Authorship Networks." *Physics Review E*64.
- Newman, Mark E. J., Duncan J. Watts, and Steven H. Strogatz. 2002. "Random Graph Models of Social Networks." *Proceedings of the National Academy of Science* 99(1):2566-2572.
- O'Neil, Tom. 2003. *Movie Awards* (Revised Edition). Perigee Trade: New York.
- Pardoe, Iain, and Dean K. Simonton. 2007. "Applying Discrete Choice Models to Predict Academy Award Winners." *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 171(2):375-394.
- Paul, William. 1977. "Hollywood Harakiri." *Film Comment* 13(2):56-62.
- Peterson, Richard A. 1979. "Revitalizing the Culture Concept." *Annual Review of Sociology* 5:137-166.
- Peterson, Richard A., and N. Anand. 2004. "The Production of Culture Perspective." *Annual Review of Sociology* 30:311-34.
- Plattner, Stuart. 1998. "A Most Ingenious Paradox: The Market for Contemporary Fine Art." *American Anthropologist* 100(2):482-493.
- Podolny, Joel M. 1994. "Market Uncertainty and the Social Character of Economic Exchange." *Administrative Science Quarterly* 39(3):458-483.

- Ravid, Abraham S. 1999. "Information, Blockbusters, and Stars: A Study of the Film Industry." *Journal of Business* 72:463-492.
- Rossman, Gabriel, Nicole Esparza, and Phillip Bonacich. 2010. "I'd Like to Thank the Academy, Team Spillovers, and Network Centrality." *American Sociological Review* 75(1):31-51.
- Salganik, Matthew J., Peter Sheridan Dodds, and Duncan J. Watts. 2006. "Experimental Study of Inequality and Unpredictability in an Artificial Cultural Market." *Science* 311: 854-956.
- Shrum, Wesley. 1991. "Critics and Publics: Cultural Mediation in Highbrow and Popular Performing Arts." *American Journal of Sociology* 97:347-75.
- Simmel, Georg. 1971. *On Individuality and Social Forms*. Chicago: University of Chicago Press.
- Simonton, Dean K. 2004. "Film Awards as Indicators of Cinematic Creativity and Achievement: A Quantitative Comparison of the Oscars and Six Alternatives." *Creativity Research Journal* 16:163-172.
- Sternberg, Robert J. 1985. *Beyond IQ: A Triarchic Theory of Human Intelligence*. New York: Cambridge University Press
- Tuchman, Gaye. 1989. *Edging Women Out: Victorian Novelists, Publishers, and Social Change*. New Haven, CT: Yale Univ. Press
- Uzzi, Brian, and Jarret Spiro. 2005. "Collaboration and Creativity: The Small World Problem." *American Journal of Sociology* 111:447-504.
- Van Rees, C. J. 1987. "How Reviewers Reach Consensus on the Value of Literary Works." *Poetics* 16:275-294.
- , 1989. "The Institutional Foundation of a Critic's Connoisseurship." *Poetics* 18:179-198.
- Watson, Mary R., N. Anand. 2006. "Award Ceremony as an Arbiter of Commerce and Canon in the Popular Music Industry." *Popular Music* 25(1):41-56.

- White, Harrison C., White Cynthia A. 1965. *Canvases and Careers. Institutional Change in the French Painting World*. New York: Wiley.
- Wijnberg, Nachoem M. 1995. "Selection Processes and Appropriability in Art, Science and Technology." *Journal of Cultural Economics* 19:221-235.
- Wijnberg, Nachoem M., and Gerda Gemser. 2000. "Adding Value to Innovation: Impressionism and the Transformation of the Selection System in Visual Arts." *Organization Science* 11(3):323-329.
- Zucker, Lynne G. 1988. "Where Do Institutional Patterns Come From? Organizations as Actors in Social Systems." Pp. 23-52 in *Institutional Patterns and Organization: Culture and Environment* edited by L. G. Zucker. Cambridge, MA: Ballinger.
- Zuckerman, Ezra W. 1999. "The Categorical Imperative: Securities Analysts and the Legitimacy Discount." *American Journal of Sociology* 104:1398-1438.
- Zuckerman, Ezra W., Tai-Young Kim, Kalinda Ukanwa, and James von Rittman. 2003. "Robust Identities or Non-Entities? Typecasting in the Feature Film Labor Market." *American Journal of Sociology* 108:1018–1074.
- Zuckerman, Ezra W., and Tai-Young Kim. 2003. "The Critical Trade-Off: Identity Assignment and Box-Office Success in the Feature Film Industry." *Industrial and Corporate Change* 12:27-67.
- Zuckerman, Harriet and Robert K. Merton. 1973. *The Sociology of Science*. Chicago: Chicago University Press.

Table 1 – List of Awarding Organizations (Audiences)

Peer Audiences	Critic Audiences
<ul style="list-style-type: none">• Academy of Motion Picture Arts & Sciences (Oscar) • Guilds<ul style="list-style-type: none">▪ Directors Guild of America▪ Writers Guild of America▪ Screen Actors Guild▪ Art Directors Guild▪ American Society of Cinematographers▪ American Cinema Editors	<ul style="list-style-type: none">• New York Film Critics Circle• National Society of Film Critics• Los Angeles Film Critics Association• Boston Society of Film Critics

Table 2 – Hollywood Studios and their Distribution Divisions*

Studio	Distribution division
Sony	American International Pictures
	Columbia
	Screen gems
	Sony Classics
	Sony Repertory
	TriStar
Universal	Focus Features
	Good Machine
	Gramercy
	October
	October Classics
	Polygram
	Rogue Pictures
	USA Films
20th Century Fox	Fox Intl Classics
	Fox Searchlight
MGM (purchased by Sony in 2005)	Orion Classics
	Orion Pictures
	United Artists
	Samuel Goldwyn
Warner Bros.	Castle Rock
	Fine Line
	New Line
	Warner Independent
Paramount	Paramount Classics (now Paramount Vantage)
	Republic
Disney	Buena Vista
	Caravan Pictures
	Dimension
	Hollywood Pictures
	Miramax
	Touchstone Pictures
Dreamworks (purchased by Viacom in 2006)	

** The studios purchased distribution divisions at different times. Many of these divisions changed ownership during the study period (for instance: Focus Features is the art house films division of Universal Studios and originated from the 2002 divisional merger of USA Films, Universal Focus and Good Machine; October was purchased by Universal in 1997; Screen Gems became a specialty film-producing arm of the Sony group in 1999; Samuel Goldwyn was purchased by MGM in 1997; Castle Rock and New Line were purchased by Warner in 1996, etc.). In attributing film releases to major studios we accounted for the timing of all such transactions.*

Table 3 – Discrete Choice Models

Variables	Model 1 Peers	Model 2 Critics
Movie Genre (dummies)	included	included
Movie Rating (dummies)	included	included
Movie Sequel (dummy)	-1.010** (0.191)	-2.025** (0.715)
Team Reputation	0.234** (0.018)	0.139** (0.034)
Degree of Control	0.112 (0.078)	-0.022 (0.119)
Commercial Success	0.224** (0.026)	0.052 (0.063)
Artistic Reputation	0.573** (0.053)	0.274** (0.092)
Number of Movies (dummy)	-0.102* (0.046)	0.244** (0.077)
Periphery	-0.927** (0.111)	0.089 (0.247)
<i>Stratifying Variables:</i>		
Awarding Organization	included	included
Year	included	included
Individual Role	included	included
ChiSq vs null	1535.18**	491.96**
Degree of Freedom	27	27
Number of Strata	163	230
Number of Accolades	1128	323
Number of Observations	47905	80677

* $p < 0.05$, ** $p < 0.01$ – Two-tailed tests for all variables (standard errors in parentheses)

Table 4 – Logistic Regression Models with Random Effects (RE)

Variables	Model 3 No RE	Model 4 RE for Professionals	Model 5 RE for Films
Movie Genre (dummies)	Included**	Included**	Included**
Movie Rating (dummies)	Included**	Included**	Included**
Organization (dummies)	Included**	Included**	Included**
Year (dummies)	Included**	Included**	Included*
Individual Role (dummies)	Included	Included*	Included
Movie Sequel (dummy)	-0.869** (0.183)	-0.894** (0.228)	-1.027** (0.369)
Team Reputation	0.212** (0.015)	0.177** (0.023)	0.553** (0.063)
Degree of Control	0.061 (0.064)	0.212 (0.109)	0.008 (0.079)
Commercial Success	0.234** (0.024)	0.052 (0.044)	0.251** (0.032)
Artistic Reputation	0.476** (0.043)	-1.343** (0.098)	0.502** (0.057)
Number of Movies (dummy)	-0.090* (0.043)	-0.168** (0.061)	0.002 (0.050)
Periphery	-0.910** (0.107)	-1.423** (0.157)	-0.443** (0.151)
Critic × Periphery	1.094** (0.262)	1.162** (0.290)	1.151** (0.279)
Critic × Number of Movies	0.295** (0.067)	0.354** (0.080)	0.338** (0.074)
Critic × Sequel	-1.397 (0.732)	-0.992 (0.746)	-1.353 (0.770)
Critic × Commercial Success	-0.244** (0.060)	-0.141** (0.068)	-0.265** (0.069)
Random Effect Variance		7.822** (0.601)	5.472** (0.504)
Number of Accolades	1451	1451	1451
Number of Observations	128582	128582	128582

* $p < 0.05$, ** $p < 0.01$ – Two-tailed tests for all variables (standard errors in parentheses)

Table 5 – Scope Conditions

Variables	Model 6	Model 7
	Logit (Peers)	Logit (Critics)
Movie Genre (dummies)	Included**	Included**
Movie Rating (dummies)	Included**	Included**
Movie Sequel (dummy)	-1.306** (0.426)	-1.148 (0.738)
Team Reputation	0.242** (0.038)	0.166** (0.063)
Degree of Control	1.383** (0.232)	0.400 (0.282)
Commercial Success	0.263** (0.057)	-0.192 (0.183)
Artistic Reputation	0.567** (0.094)	0.285 (0.189)
Number of Movies (dummy)	-1.106** (0.170)	0.192 (0.174)
Periphery	-1.109** (0.231)	0.322 (0.553)
<i>Fixed Effects:</i>		
Year	included	included
Individual Role	included	included
ChiSq vs null	539.53**	142.68**
Number of Observations	21446	16959

* $p < 0.05$, ** $p < 0.01$ – Two-tailed tests for all variable (standard errors in parentheses)

APPENDIX

The Social Network Structure of the Field

To analyze the social structure of the industry, we reconstructed the bipartite affiliation network between professionals and movies. The bipartite network is a triple $G = (\mathcal{T}, \perp, E)$ where \mathcal{T} (movies) and \perp (professionals) are two disjoint sets of nodes – i.e., the top and bottom nodes, respectively – and $E \subseteq \mathcal{T} \times \perp$ is the set of links of the network. This differs from classical (unipartite) networks in that links exist only between top nodes and bottom nodes. Examples that have been studied in the past include networks of individuals joined together by common participation in social events (Davis, Gardner and Gardner 1941), CEOs of companies joined by common membership of social clubs (Galaskiewicz and Marsden 1978), collaborations among Broadway artists (Uzzi and Spiro 2005), and co-authorships (Newman 2001). For instance, in the case of co-authoring \mathcal{T} would be the set of papers and \perp the set of authors, each author being linked to the papers s/he (co-)authored. Since group membership can often be established from membership lists or other sources, studies of these networks do not have to rely on interviews or questionnaires, thereby allowing one to construct much larger and more accurate networks than in traditional social network studies (Newman, Wattz and Strogatz 2002).

Given a bipartite network $G = (\mathcal{T}, \perp, E)$, one can easily obtain its unipartite version defined as $G^{\perp} = (\perp, E^{\perp})$ where $\{u, v\}$ is in E^{\perp} if u and v are both connected to the same (top) node in G . As illustrated in Figure 1, starting from the bipartite individual-by-movie network one can then recover the unipartite version. In this unipartite version of the network, each top node (movie) induces a complete sub-network among the bottom

nodes (individuals) to which it is connected. Links form between individuals when they work on multiple movies.

<< Insert Figure 1 >>

In defining a tie, we had to make an assumption about the duration of the relationship between professionals. With no control for relationship decay, professionals' network connectedness would be highly inflated due to the likely inclusion of ties to inactive artists. Following a common practice in network studies, we made the adjacency matrixes time-limited by using a three-year moving window to control for the duration of each tie. In essence, each year we added nodes and ties resulting from new movies, and deleted nodes and their ties that had been inactive for 3 years (see also Uzzi and Spiro 2005). We started with the professionals who worked in 1995 and used the earlier three-year data to construct the accumulative relational profiles (i.e., the period 1992-1994 can be viewed as the time needed to establish the network structure that professionals brought to the period 1995 onwards). We used the resulting ten time-varying matrices to compute all individual level network measures. Using alternative windows of two, four and five years produced no appreciable differences in our results.

Figure 1

A bipartite network and its unipartite version

